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ABSTRACT

This annual report summarizes all Manpower Administration-sponsored research projects active or funded during fiscal year 1970 and lists all reports completed since the research program was begun in fiscal year 1963. Guidelines are included for submission of research proposals for research contracts, dissertation grants, and research project grants. The relevent legislation, Title I of the Manpower Development and Training Act, is reproduced in the appendix. (BH)

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MANPOWER RESEARCH PROJECTS

SPONSORED BY THE
U.S. DEPARTMENT OF LABOR,
MANPOWER ADMINISTRATION

Through
June 30,1970

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Manpower Administration

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U.S. DEPARTMENT OF LABOR
J. D. Hodgson, Secretary of Labor
MANPOWER ADMINISTRATION

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INTRODUCTION

This volume is the eighth in a series of annual reports on research projects sponsored by the Manpower Administration of the U.S. Department of Labor in connection with its responsibilities under various statutes to carry out programs to develop and make better use of human resources. The legislative authority for the various research programs is described at appropriate places in the volume and hence is not recapitulated here.

Projects in progress at the end of fiscal year 1970 under all of these programs are described in section 1 of this publication. Information is included on projects carried over from earlier years and on those newly funded during the year. Brief summaries of research completed during fiscal year 1970 comprise section 2, and a cumulative list of reports completed since the inception of the research program in fiscal year 1963 is given in section 3. Guidelines for the submission of research proposals are presented in section 4 for those social scientists who may be inspired by the contents of this volume to join their peers in helping the Department to do a better job in solving manpower problems.

This volume does not, however, fully reflect two major developments in the manpower research program which occurred during fiscal year 1970. First, 12 universities were selected in February 1970 to receive major grants for manpower research and the education of manpower specialists. These grants will total $3,150,000 over the next 4 years, but the first awards—in the form of 1-year planning grants—did not go to the universities until August 1970. Hence, detailed descriptions of their programs will not be included until fiscal 1971. Meanwhile, this publication summarizes activities under 5-year grants awarded to seven colleges and universities in 1966, whose programs are being phased out since they are well-enough established to attract support from other sources.

The second development—the merger of the Office of Manpower Research, which had administered the research programs described here, and the Office of Special Manpower Programs, which had administered the Manpower Administration's experimental and demonstration program, into the Office of Research and Development—occurred in the spring of 1970. The timing of the merger vis-à-vis the publication deadline for this volume precluded the inclusion of the experimental and demonstration projects sponsored by the Manpower Administration. Next year, however, these projects will be included.

Since space limitations will dictate some curtailment of the full historical listing of research reports found in section 3, readers may wish to save this 1970 volume as a reference work as only recently completed research will be listed in the future.

FOR FURTHER INFORMATION ON MANPOWER RESEARCH

1. Requests for information concerning active projects should be directed to the principal research staff.

2. See section 3 for a listing of reports that have been completed since 1963 under the research programs described in this volume and for information about how these reports may be obtained. PLEASE DO NOT WRITE TO THE MANPOWER ADMINISTRATION FOR COPIES OF THESE REPORTS WITHOUT CONSULTING THE LISTING IN SECTION 3. THOSE FOR WHICH THE SOURCE OF COPIES DOES NOT INCLUDE AN "MA" DESIGNATION CAN BE OBTAINED **ONLY** FROM THE ALTERNATIVE SOURCES LISTED.

SECTION 1. PROJECTS ACTIVE ON JUNE 30, 1970

This section outlines the objectives and procedures of projects on which research was in progress at the end of fiscal year 1970. Reports include work being carried out on research contracts, manpower research institutional grants, doctoral dissertation grants, and research project grants. These contracts and grants were awarded under the Manpower Development and Training Act, the Economic Opportunity Act, and the Social Security Act.

1.1 PROJECTS ACTIVE ON JUNE 30, 1970—Research Contracts Under the Manpower Development and Training Act (MDTA)[1]

1.1.01 BATTELLE MEMORIAL INSTITUTE COLUMBUS, OHIO

CONTRACT NO. 81-37-68-40[2]

Principal Staff: Ronald J. Cress

Project Title: An Exploratory Study to Analyze New Skill Content in Selected Occupations in Michigan and the Mechanism for Its Translation Into Vocational Education Curriculums

Objectives and Procedures: This study intends to make curriculum planning for vocational education more responsive to changing job skill requirements and to improve the mechanisms by which such changes are detected and translated into vocational school curriculums.

Through interviews with employers, employees, and members of advisory committees in three Michigan cities, current and prospective job content and skill requirement information is being gathered for 10 occupations associated with economic growth.

Curriculums designed for these occupations are being analyzed in order to identify areas where changes are needed. The researchers will work with school officials to implement the recommended changes.

Status of Project: Completion is scheduled for December 1970.

1.1.02 BUREAU OF SOCIAL SCIENCE RESEARCH, INC.

WASHINGTON, D.C.

CONTRACT NO. 81-09-66-27

Principal Staff: Gene Peterson

Project Title: Occupational Adjustment of Recent Low-Income Southern In-Migrants to Cleveland

Objectives and Procedures: This three-phase project concerns the occupational adjustment in Cleveland of low-income southern in-migrants with less than 2 years, and 2 to 5 years, of residence. The project integrates research with an experimental program sponsored by the Manpower Administration's Office of Research and Development.

In phase I, the researchers identified 1,600 low-income southern newcomers to Cleveland and interviewed them for information on their occupational adjustment. For comparison, a sample of 400 Cleveland residents of more than 10 years was also interviewed.

In phase II, the experimental element, the researcher referred selected recent in-migrants to the PEACE (Programs for Educational and Cultural Excellence) Skill Center program for special services, including prework orientation, job placement, and/or referral to MDTA training, to assist them in entering urban employment and community life.

In phase III, the researcher is making longitudinal examination of the conditions generating individual changes in work status and urban adjustment. An attempt is being made to reinterview the entire sample of 1,600 in-migrants, as well as the long-term Cleveland residents originally interviewed.

Interviews focus on the in-migrants' social, cultural, urban, and economic adjustment experiences, with special emphasis on past and current employment, changes in occupational aspirations, adjustments to city life, and particularly the impact of the skill center programs in facilitating assimilation of those enrolled.

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[1] Requests for information concerning these contracts should be directed to the principal staff.

[2] This study is cosponsored by the Office of Education of the U.S. Department of Health, Education, and Welfare; the Michigan Employment Security Commission; and the Michigan State Department of Education.

Status of Project: Drafts of final reports for phases I and II have been received. Work on phase III is underway. Completion of the project is scheduled for June 1971.

Highlights of Preliminary Findings: Low-income newcomers to the city generally had more education and training skills than did long-term low-income residents. Negro newcomers had more education, were younger, and more often were unmarried than their white counterparts, but whites held more skilled and higher paying jobs. Men, both white and Negro, were better off in Cleveland than women.

The chief reason reported for moving was economic; i.e., jobs and wages. Yet most of the newcomers' (white and Negro) first jobs in Cleveland were as operatives (men) or in clerical and sales positions (women). This occupational pattern had not changed by the time of the survey. Negro men were still predominantly in operative occupations but a number of white men had advanced into craft occupations or jobs as foremen. Most of the newcomers felt they were better off as a result of moving to Cleveland.

1.1.03 UNIVERSITY OF CALIFORNIA, BERKELEY

BERKELEY, CALIF.

CONTRACT NO. 81-05-68-43

Principal Staff: Dr. Lloyd Ulman, Dr. Margaret S. Gordon, and Dr. Margaret Thal-Larsen, Institute of Industrial Relations

Project Title: Employment Agencies and School Placement Services in a Large Metropolitan Labor Market

Objectives and Procedures: This study investigates: (1) The impact of increased national emphasis in manpower programs on the relative roles and effectiveness of public and private employment agencies and placement services; and (2) the relationships between employment agencies and educational institutions, particularly in the development, transmission, and use of information on occupational changes in the planning of vocational education and training programs. Data have been collected by questionnaire from the public employment service, private placement services, and counselors in secondary schools and junior colleges in the San Francisco Bay area. The questionnaires were developed under a planning grant from the Manpower Administration.

Status of Project: Completion is scheduled for August 1970.

Highlights of Preliminary Findings: In the San Francisco Bay area, the researchers found that:

1. Recent changes in the direction of employment service programs have tended to strain the resources to provide regular services to applicants, since new programs were not accompanied by adequate funds, staff, and technical information.

2. As a result of the increased responsibilities of public employment agencies toward the disadvantaged, a sharp dichotomy is developing between their functions and those of private employment agencies. There is a greater emphasis on placement in the private agencies, and they have become increasingly prominent as hiring channels for the Bay area's better qualified workers. In comparison with the local employment service offices, they are more specialized by occupation.

3. Students in Bay area schools, especially public high schools, are little better prepared now for the realities of the labor market than they were in 1960. In the main, school counseling programs are so impaired by a shortage of resources that occupational guidance is little more than a secondary consideration. Further, schools and colleges in the area lack the ability to obtain greater involvement by community, professional, business, and union groups as resources in the counseling process.

4. Local employment service offices tend to provide less labor market information and fewer testing and placement services in schools than was the case earlier when they maintained more extensive formal cooperative arrangements with the schools.

5. To carry out the crucial duties of job placement, counseling, and occupational guidance, the employment service, the private employment agencies, and the schools have a critical need for an adequate labor market information system which would prepare and deliver relevant information, including both current and long-range occupational trend data.

1.1.04 UNIVERSITY OF CALIFORNIA, BERKELEY
BERKELEY, CALIF.

CONTRACT NO. 71–05–70–03

Principal Staff: Dr. Margaret Thal-Larsen

Project Title: Requirements and Design of a Labor Market Information System for a Large Metropolitan Area

Objectives and Procedures: This is one of several projects authorized under section 106 of the Manpower Development and Training Act, as amended in 1968, which directed the Department of Labor to develop a comprehensive labor market information system (LMIS). (Related projects are described in **1.1.08, 1.1.22,** and **1.1.41.**)

The objectives of the present project are: (1) To appraise present means of developing and delivering labor market information in the San Francisco Bay area, with primary emphasis on the volume, location, and nature of current job opportunities and occupational trends; (2) to design a model for a labor market information system that might serve as a prototype for large, diversified labor market areas and develop quantitative criteria for measuring the performance of such a system; and (3) to compare the cost effectiveness of current and feasible future labor market information systems.

Using an interview guide, information is being sought from public and private employment agencies, counselors in secondary schools and junior colleges, officials working with the disadvantaged, technical specialists, and representatives of management, labor, government, and other organizations conversant with the various elements of a labor market information system. The supply of information is being compared with the needs of various users, and criteria are to be developed for identifying the most necessary elements of the LMIS, as a guide to the use of resources (assuming different budget levels) to get the system into operation.

Status of Project: Completion is scheduled for December 1971.

1.1.05 CENTER FOR POLICY RESEARCH
NEW YORK, N.Y.

CONTRACT NO. 81–34–70–04

Principal Staff: Dr. Amitai Etzioni and Dr. Marvin Sontag

Project Title: Mutual Adaptability of Workers and Organizations

Objectives and Procedures: This study aims to develop a set of concepts and operational tools for more effective matching of persons with jobs and thereby facilitate placing disadvantaged persons in jobs which they can adequately perform and hold with some permanency. Specifically, these tools are being designed to measure workers' predispositions toward "bureaucratic" behavior (adherence to organizational requirements regarding time, task, and authority) and the extent to which particular types of jobs demand such behavior. The implications of the requirements for bureaucratic behavior in various types of training programs and jobs for disadvantaged persons are also being analyzed.

Status of Project: Completion is scheduled for September 1971.

1.1.06 COLUMBIA UNIVERSITY
NEW YORK, N.Y.

CONTRACT NO. 81–34–67–25

Principal Staff: Dr. Eli Ginzberg, Conservation of Human Resources Project

Project Title: Employment Expansion in a Dynamic Economy—A Series of Related Studies

Objectives and Procedures: This continuing project of interdisciplinary research studies probes deeply into the changing structure and functioning of American society to determine the different ways in which the development and use of the Nation's human resources affect the level of social well-being and economic output. Members of the research team conducted intensive research of problem areas as a basis for recommending remedial action.

Status of Project: Since the project was initiated, 13 studies have been completed (see **3.1.20, 3.1.21, 3.1.23–31**). The five completed during fiscal year 1970 are summarized elsewhere in this volume (see **2.1.05**). The studies on which work is still in progress are described below. (For ease of reading, the customary format of separate headings for objectives and procedures and preliminary findings, if any, is not followed in the presentation below.) The first nine studies enumerated below are scheduled for completion during fiscal year 1971; the other two during later years.

1. "The Dynamics of Employment Opportunity." This study is exploring the nature and extent of employment opportunity. The analysis seeks first to determine the relative importance of factors that account for the ranking of different industry-occupation groups on measures of rewards to workers and their vulnerability to unemployment and low annual earnings. The second stage of the study will examine the growth or decline of the less favorable sectors and assess the job prospects in light of possible changes in business organization caused by mergers, alterations in size of firm, franchise-contracting-out arrangements, and the impact of government policies, as well as other types of organizational changes such as growth of trade unionism and controls over entry into the occupation.

Preliminary findings suggest that the earnings of women workers, who generally have the lowest level of mobility in the labor force, are an important supplement to family income in the middle ranges. Where women are primary earners, however, the nature of their employment provides insufficient income and stability for adequate living standards. Men who occupy positions in the labor force that also exhibit these unfavorable employment characteristics are similarly disadvantaged.

A summary table has been prepared detailing the proportion of all male workers in each industry-occupation group who earn sufficient wages to support their families; the proportion where family income is adequate because of supplemental earnings of wives; and situations where, despite two workers, the family's income is still below acceptable standards.

2. "Teenage Employment, A Comparative View." Against the background of European countries in which teenage unemployment rates are generally lower than in the United States, this study explores differences and similarities in the positions of youth which may contribute toward an understanding of the variations in youth unemployment rates among countries. Attention is given to demographic developments, school attendance trends, the extent of concurrent attendance at school and work, and the interrelationships of youth labor force participation rates, population growth, employment, unemployment, and the attitudes of youth toward work. The relative demand for youth is analyzed by occupation, size of firm, wage level, region, and formal training arrangements for young people. Moreover, the institutions which prepare teenagers for work and assist in the transition from school to work are discussed from the national, regional, and special group (e.g., the disadvantaged) points of view.

The study covers four countries (England, Sweden, France, and the United States) and is based both on the detailed analysis of relevant demographic, labor market, and economic data and on field research directed to eliciting employer opinions and practices.

Preliminary examination of the data suggested several reasons for the much lower rate of unemployment among youth in Europe: Manpower shortages, particularly for highly skilled workers, partly due to the less sophisticated state of technological development: employment of young people at low-wage rates; and less reliance on combined work-study arrangements.

3. "Manpower Planning and Technological Change: The Steel Industry." This study focuses on the introduction of new technology in the steel industry over the last 15 years, especially the forecasting of manpower requirements and the development of hiring policies to insure a work force with needed new skills. The emphasis is placed on skilled workers, executives, professionals, and technical personnel who move up to a higher level in the transition to a new technology.

The researcher found that steel managements tend to feel no particular difficulties in keeping abreast of changes in the nature of their technology, since much cooperation exists within the industry. Information has flown freely through journals, industry meetings, visits to plants, mobility of executive and professional employees, and joint training programs. However, all members of the industry do not necessarily adopt known technological improvements at approximately the same time. Investment in new capital facilities depends largely on anticipated market conditions, tax considerations, realizable savings, and other economic variables.

Also, a major change in technology is composed of many interrelated ongoing changes in the subcomponents of the technology, including the nature of raw materials, the chemistry and physics of processes, handling techniques, and speed of process. Thus, management, finding it difficult to forecast the precise nature of new skills that will be required and the precise time at which they will be required, tends to hire people with potential for acquiring needed skills.

4. "Aging in the Ghetto." This study examines the interrelationship of the processes of aging—the multiplication of health defects, the difficulties of access to job market information, and the impediments to access to social services—and how these processes contribute toward the loosening of ties with the world of work for minority group members. The study also explores the effects on ghetto residents of the cumulative relative deprivation of investments (such as education, job training, or health care) in human capital. It is based on intensive interviews with adults located in a black neighborhood in the central core of a large eastern seaboard city which had been experiencing a marked out-migration of industry, particularly of the kinds of firms that were the major employers of black men and women.

Preliminary findings indicate that: (a) Older men and women are most likely to drift out of the labor force if they have no close family ties and responsibilities, if they do not have full-time or full-year jobs, and if they are recent migrants into an urban ghetto. (b) Blacks have experienced great difficulties in attempting to move near the new locations of firms that have been their major employers, even when the firms in good faith offered continued employment. This has contributed strongly to a feeling of abandonment by many blacks, particularly those with relatively strong attachment to certain firms or industries. (c) As services—particularly public services—in the black neighborhood deteriorate, the aging portion of the black community feels itself extremely exposed to a kind of social chaos. Many tend to withdraw to the relative security of their homes; the result is a marked decrease in physical mobility, even during daytime. (d) In a time of declining employment in the central core of the city, when the proportion of friends and acquaintances still employed begins to fall drastically, traditional means of securing new employment opportunities become less efficient, and it is extremely difficult for a minority group member to develop alternative means.

5. "The Theory of Manpower." This study examines how an expansion of skills determines an increase in the standard of living of the population and how the rate at which the "stock of skills" expands is governed by the society's value orientation, political cohesiveness, economic organization, and human resource capabilities.

The study is divided into sections, the first of which focuses on economic development, or the macro-supply aspect of the theory of manpower. The second section examines the micro-supply aspect and stresses specific institutions that determine the development of manpower—the family, church, schools, the military, and employing organizations. This section also explores the class structure and the distribution of income. The last two sections point up the processes of the utilization of human resources. The macro-demand aspect examines business expectations, government policy, and the effectiveness of the labor market, especially its facilitating mechanisms, including job information, selection, assignment, and on-the-job training, and their relationships in the utilization process. The analysis in this section also points up the serious costs of a loose labor market, stressing the utilization or nonutilization aspects from the viewpoints of the worker and of the employing organizations. The final section —the micro-demand aspect—explores the process of organizational affiliation in terms of organizational imperatives: e.g., the nature of the conflict between the needs of the organization and those of the individual. These needs are related to the fundamental problems that confront contemporary society.

The principal finding from the analysis completed to date is the necessity, from the viewpoint of both manpower theory and policy, to deal simultaneously with the interaction of the four major societal systems—values, political, economic, and manpower—rather than to treat them as isolated elements.

6. "Growing Up in a Desegregated World." This study explores the experiences, attitudes, and aspirations of a sample of Negro and white youth who were raised in the desegregated military environment of the 1950's and 1960's. Data have been collected from replies to questionnaires distributed in 1969 and 1970 to Air Force noncommissioned officers and to their children of high school age and above. Interracial and intergenerational comparisons are being made and the youths' educational and career aspirations are being compared with those of children from stable civilian families at similar socioeconomic levels.

Preliminary examination of the fathers' responses indicates that Negro NCO's tend to be in lower grades than whites who have similar lengths of service and educational attainment. Moreover, more black than white military personnel are moonlighting and more wives of the former are working. Of particular interest is the finding that while most white NCO's believe that Negroes have better chances to get ahead in the military than in civilian life, less than half of their black counterparts agree with this estimate of their relative opportunities.

There is evidence that the younger generation of whites is more receptive to integration than are their fathers. On the other hand, although a minority of Negro fathers and children favor all-black schooling, many more of the children indicate such a preference. This suggests that considerable caution must be exercised in assessing the impact of desegregation, per se, in light of forces in the larger society that may be exerting counterpressures. In addition, in many cases it may not be possible to distinguish clearly between the impact of the policy of desegregation and that of special experiences available to military families, such as extended residence abroad.

7. "Quasi-Metropolitan Labor Markets." This study seeks to assess the role of the small city and urban places (with up to 50,000 in population) in regional economic development, including their part as a transition point for workers migrating from rural areas. A typology of small cities is being developed to distinguish those with potential for growth. Particular attention is being paid to the way in which various features of the small-city job market—opportunities for seasonal industrial jobs and workers' access to jobs via transportation and information, for example—act to prepare certain workers for a probable move to the city. This exploratory effort seeks to shift attention in migration studies from the individual migrant to the relative strengths and weaknesses of communities to attract or hold people of working age.

8. "Employment Expansion in Suburban Labor Markets." The purpose of this study is to analyze the industrial composition of employment expansion in the central city and in contiguous counties for a selected group of metropolitan areas. Nodal (servicing a hinterland area) and nonnodal economies within each of three size categories (small, medium, and large) will be studied.

Among the hypotheses to be examined are: (a) That employment expansion in the outlying areas is not only relatively more important in large metropolitan economies than in small but gives rise to a relatively larger amount of local service (supporting) employment since these developing areas tend to be more insulated from the central city; and (b) that nodal places show different employment growth patterns than manufacturing places.

Statistical research will involve chiefly analysis of the Census of Manufactures and data for cities and counties for three years—probably 1957, 1963, and 1967. Field research will be limited to no more than four metropolitan economies. Interviews will center largely on identifying some of the specific dynamic mechanisms affecting development for the period under study.

9. "The Role of Training in the Mobility of the Blue-Collar Workers." This study evaluates the past experiences and future potential of training as an instrument for enhancing the job mobility of selected groups of blue-collar workers. Research focuses on selected industries in New York City including apparel manufacture, food service, health services, local public transit, and printing and/or construction. A review of manpower utilization patterns in each industry is followed by an assessment of each training structure which influences the flow of people into and upward within each field. The evaluation of government training programs centers on their ability or inability to improve pre-existing patterns. Data are drawn from operating reports of Federal, State, and local agencies and interviews with employers, union representatives, employees, training officials, and trainees.

Preliminary work in three selected industries generally supports the findings of previous studies. With only a few exceptions, the expansion of formal training opportunities does little to improve upgrading opportunities because of the relatively small number of skilled positions which exist and the prevailing practice of informal on-the-job training as a means of skill acquisition. In addition, some training provided at vocational high schools and in Federal programs is found to be of little use in improving the individual's employment status. Industry manpower problems appear to be frequently more related to factors other than training, including low wages, discrimination, and deficiencies in basic education.

10. "The Interface of Work and Welfare." This study examines the New York City welfare caseload with a three-fold objective: (1) To identify the particular

group with the greatest potential for work and self-support; (2) to understand the dynamics of exchange between employment and public assistance; and (3) to analyze the impact of the Work Incentive (WIN) Program, under the Social Security Act Amendments of 1967, upon the welfare program to date.

Utilizing data from the New York City Department of Social Services and from the Department of Health, Education, and Welfare's Survey of Aid for Families with Dependent Children caseloads in 11 cities, the present welfare population will be disaggregated, in the first instance through a pool-and-flow analysis of the individual categories: AFDC, AFDC—Unemployed Parents (UP), Home Relief (HR) and Old Age Assistance, Aid to the Blind, and Aid to the Disabled. With respect to the last three groups, the study aims to ascertain the number and characteristics of those who are employed; also studied will be the employment history of individuals prior to enrollment for Old Age Assistance. Also, much emphasis will be placed on the AFDC, AFDC (UP), and HR categories, which contain the bulk of able-bodied working-age and preworking-age persons. Among adult recipients, distinctions will be drawn by age, number and ages of dependent children, education, training, and work experience. For adolescent dependents aged 16 and over, who offer the greatest potential for future employability, information will be obtained on school history, vocational training, and work experience. HR and AFDC (UP) caseloads will be specifically examined for openings, closures, and intercategorical shifts, relative to unemployment and employment. At selected centers, the records of a sample of opening and closure cases and of recipients who voluntarily enrolled in the WIN Program will be analyzed.

11. "Employment Expansion and Metropolitan Trade." This study focuses on the sources of employment expansion in metropolitan job markets resulting from exports to other metropolitan and nonmetropolitan centers, import substitutions, and increased local demand for goods and services. Using census data for 1940, 1950, and 1960 for 31 industrial classifications, researchers are analyzing changes in the industrial mix of imports and exports, as well as associated changes in the composition of employment. The analysis of trends in the export base (including services as well as commodities) and the calculation of its multiplier effect on other aspects of metropolitan output are critical, new methods for estimating employment prospects and planning appropriate training programs.

Preliminary findings indicate that about 75 percent of the variations in the rates of employment change among 368 metropolitan areas are accounted for by differences in the export base, counting both the direct effects of changes on employment in the export sector and the indirect effect of the local multiplier.

It also appears that intermetropolitan trade is expanding at approximately the same rate as metropolitan employment, but metropolitan trade with nonmetropolitan areas is declining. The regional patterns of trade, employment expansion in trade activity, interregional and intraregional shift of export activity, and the degree of concentration were found to vary considerably by industry. There was a trend toward increasing diversification in the local sector; however, over half of the employment in exports was in one industry category for 145 metropolitan areas. The importance of the process of import substitution was found to have increased.

1.1.07 COLUMBIA UNIVERSITY
NEW YORK, N.Y.

CONTRACT NO. 81-34-68-44

Principal Staff: Stanley Friedlander, Conservation of Human Resources Project

Project Title: Strategic Factors in Urban Unemployment

Objectives and Procedures: The study analyzes unemployment in the 30 largest cities in the United States and in 16 slum areas located in these cities to determine why differentials between cities and slum areas vary with the level of economic activity. Data for 1960 and 1966 are being used to test three models: (a) The economic role of supply and demand for labor; (b) industrial structure of the local labor market; and (c) labor market rigidities focusing on education, health, discrimination, mobility, and information and illegal activities. The study also encompasses a statistical analysis of the unemployment problems of young workers in the areas, complemented by interviews with Negro residents between 18 and 24 who are the Armed Forces. The interviews focus on work his-
neither full-time students or workers nor members of

tory, vocational experiences, work attitudes and expectations, sources of income, and living arrangements.

Tentative findings indicate that the growth of the economy between 1960 and 1966 was not sufficient to solve the employment problems in our major slums. Statistical changes in supply and demand for labor contributed to unemployment in both cities and slums. However, the industrial mix in some cities tends to create a dual labor market in which slum residents are at a decided disadvantage in finding and holding steady jobs. In the same city, the unemployment rates for the city as a whole and for slum residents can be widely disparate, due to employment discrimination and the fact that many slum area Negroes work on jobs that are seasonal or subject to frequent layoffs. Even when hired on a "steady" job, lack of seniority makes them vulnerable to dismissal.

Also, it was found that the greater the income from nonwork, such as welfare or illegal activities, the lower the unemployment rates for slum residents. The levels of education for slum residents were found to be relatively unimportant in explaining the differences in slum unemployment rates. Furthermore, raising the nonwhite educational levels would not be sufficient to eliminate high unemployment, as long as institutional barriers preventing black entry into employment continues.

Status of Project: Completion is scheduled for September 1970.

1.1.08 COLUMBIA UNIVERSITY NEW YORK, N.Y.

CONTRACT NO. 71-34-70-04

Principal Staff: Dr. Eli Ginzberg, Conservation of Human Resources Project

Project Title: Conceptual Foundations of Labor Market Information System

Objectives and Procedures: The purpose of this study is to delineate the parameters of a comprehensive labor market information system in order to aid the Department of Labor in meeting its responsibilities under section 106 of the Manpower Development and Training Act, as amended in 1968. (Related projects are described in **1.1.04**, **1.1.22**, and **1.1.41**.) The study consists of the following elements: (1) Critical review of the several public reports directed to the question of improving existing labor market information systems; (2) three case studies probing the range of labor market information existing and required by jobseekers, employers, and policymakers; (3) preparation of a draft working paper outlining the principal dimensions of the problem and directed at developing a conceptual framework for labor market information systems; and (4) a conference of experts (including other contractors doing research on related aspects of the labor market information system) to discuss the draft and contribute insights on labor market problems based on their diverse experience and disciplines.

Status of Project: Completion is scheduled for June 1971.

1.1.09 EDUCATIONAL TESTING SERVICE PRINCETON, N.J.

CONTRACT NO. 81-32-69-03

Principal Staff: Dr. Benjamin Shimberg and Dr. Barbara Esser

Project Title: Impact of Licensing on the Supply and Mobility of Skilled Manpower in Selected Nonprofessional Occupations

Objectives and Procedures: This study is an intensive probe of the extent to which licensing procedures and requirements restrict entry into and mobility within selected nonprofessional occupations where manpower shortages have been reported—plumber, electrician, practical nurse, dental hygienist, clinical laboratory technician, barber, and cosmetologist. The study covers eight States (Alabama, Arizona, California, Florida, Illinois, New York, Oklahoma, and Texas) and 24 municipalities within those States. Information is being sought in interviews with licensing officials, vocational educators, union officials, officers of occupational associations, employers, and licensing applicants. Topics to be explored include: The structure and operations of licensing boards; licensing requirements (e.g., age, sex, education, training, citizenship, and work experience); the examination process;

communication between licensing agencies and applicants; existing training resources; and costs of licensing.

This research, an outgrowth of a pilot study by one of the above researchers (see **3.5.09**), complements another current research project (see **1.1.20**). Together, the two studies are designed to yield information that can be used to make it easier for disadvantaged workers to enter licensed occupations while safeguarding legitimate public interests.

Status of Project: Completion is scheduled for December 1970.

1.1.10 GEORGETOWN UNIVERSITY
WASHINGTON, D.C.

CONTRACT NO. 81-09-70-02

Principal Staff: Herbert S. Miller, Leonard Zeitz, Stephen B. Rosenberg, Institute of Criminal Law and Procedure, Georgetown University Law Center

Project Title: The Effect of a Criminal Record on Employment with State and Local Public Agencies

Objectives and Procedures: This study seeks to ascertain State and local government policies and practices concerning the employment of individuals with criminal records (juvenile and arrest and conviction records) and the extent to which they act as barriers to these individuals in obtaining public employment.

The researchers are reviewing relevant constitutional, statutory, and administrative rules and regulations, as well as judicial interpretations, of selected political jurisdictions—including all 50 States, 310 cities with over 50,000 population, 301 counties with over 100,000 population, and selected multipolitical-jurisdictional organizations (such as port authorities, public service districts, and planning districts).

Through mail questionnaires to all civil service commissions and other important government agencies, the researchers are investigating legal requirements and day-to-day practices in the hiring of persons with criminal records and experience with those employed. Modified mail questionnaires are being sent to public and private agencies concerned with finding employment for those with criminal records.

Six of the political jurisdictions have been selected for intensive investigation of legislative requirements and administrative practices and procedures, both formal and informal, concerning the hiring of individuals with criminal records. In these jurisdictions, interviews are being conducted with officials of civil service agencies, government departments or divisions, employment agencies, human relations commissions, antipoverty organizations, probation and parole departments, social work organizations, vocational and offender rehabilitation agencies and programs, legal services programs, and various employment and training programs.

Finally, interviews are being conducted with individuals with criminal records who work in public agencies to learn how the practices affect their job opportunities in government and how the existence of criminal records influence their advancement.

Status of Project: Completion is scheduled for November 1970.

1.1.11 HARVARD UNIVERSITY
CAMBRIDGE, MASS.

CONTRACT NO. 81-23-68-37[3]

Principal Staff: Dr. Richard B. Freeman, Department of Economics

Project Title: A Study of Factors Affecting the Demand for Scientists, Engineers, and Technicians and Methods of Forecasting This Demand

Objectives and Procedures: This study seeks to improve forecasts of the demand for scientists, engineers, and technicians. It is developing and testing a model of the demand for these workers that focuses on the causes of changes in demand and the effects of substitution among different occupations. Input-output analysis is being used to estimate the effects of research and development work on requirements for labor skills, capital, and intermediate goods.

In addition, differences in skill composition between firms with "best practice" technology and those with older technologies are being ascertained from representatives of such firms to permit assessment of whether demand projections based on "best practice" techniques would be superior to those based on the "average" technique in the industry as a whole.

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[3] This study is cosponsored by the National Science Foundation.

Status of Project: Completion is scheduled for September 1970.

1.1.12 HARVARD UNIVERSITY
CAMBRIDGE, MASS.

CONTRACT NO. 81–23–69–17

Principal Staff: Dr. John T. Dunlop, Department of Economics, and Dr. Daniel Quinn Mills, John F. Kennedy School of Government

Project Title: Manpower Development and Utilization in the Contract Construction Industry

Objectives and Procedures: This comprehensive appraisal of the construction industry's capacity to prepare for projected changes in its manpower requirements and effect racial integration in the construction trades focuses on the need to modernize the industry's training system. Problems to be explored include the relationship between seasonality and the continuity of training programs; the costs and data needed for developing techniques of manpower forecasting and work scheduling to improve the use of manpower; the use of labor-management training funds to improve and stabilize industry training programs; and informal methods of entry into the construction trades for minority workers. Data are being collected through: (1) Informal interviews with representatives of the contract construction industry, building trades unions, Federal agencies, and the academic community; (2) observation and analysis of selected training programs; and (3) analysis of statistics and research studies.

Status of Project: Completion is scheduled for October 1970.

1.1.13 HARVARD UNIVERSITY
CAMBRIDGE, MASS.

CONTRACT NO. 81–23–70–08

Principal Staff: Dr. Peter B. Doeringer, Department of Economics

Project Title: Service Employment, Collective Bargaining, and the Low Wage Labor Market

Objectives and Procedures: This study of the forces that determine the characteristics of jobs and employment in low-income labor markets tests the premise that instability of employment in these markets is the result of a deficiency in their employment function rather than in the skill and training capabilities of individual job holders. The study is directed to three major questions: (1) What factors affect the quality of work in low-income labor markets? (2) What factors influence the transition of workers from low-income to high-income labor markets? (3) What types of Federal manpower programs will most effectively upgrade workers out of the low-income labor market or improve the quality and earnings potential of low-income work?

The investigation centers on the relationship between collective bargaining and low-wage service employment. Collective bargaining is thought to exercise a positive influence upon compensation, employment stability, career opportunities, and equitable supervision, and it occurs within the context of broader trends in the economy. A major part of the study involves an examination of those economic and legal forces which have either assisted or impeded the growth of collective bargaining in the service sector.

The major source of data and contacts is the Service Employees International Union (SEIU). Informal, unstructured interviews are to be conducted with officers and staff of the International, local union officials, major employers, and staff members of employer associations. The union has agreed to provide data which it has compiled on economic conditions, wages, pensions, labor force mobility, and composition of membership as well as union documents such as convention proceedings, newspapers, journals, collective bargaining agreements, and other manuals or internal memoranda. Finally, arrangements have been made to examine the SEIU-sponsored building service training program in Washington, funded by the Manpower Administration, and its relationship to the low-income, service labor market.

Status of Project: Completion is scheduled for July 1971.

1.1.14 UNIVERSITY OF ILLINOIS
URBANA, ILL.

CONTRACT NO. 81–15–69–07

Principal Staff: Dr. Walter H. Franke, Institute of Labor and Industrial Relations

Project Title: Development of a Model University Human Resources Program

Objectives and Procedures: This project is planning a model for a human resources program as a guide to the creation of university manpower centers. Primarily through workshops, the study is developing an inventory of the types of services a university human resources program might offer, particularly in development of local, State, and regional manpower programs; experimenting with programs for the dissemination of manpower information and ideas; and developing tentative research areas and designs.

Status of Project: Completion is scheduled for October 1970.

1.1.15 THE UNIVERSITY OF KENTUCKY RESEARCH FOUNDATION
LEXINGTON, KY.

CONTRACT NO. 81–19–68–13[4]

Principal Staff: Dr. F. Ray Marshall, Department of Economics

Project Title: Negro Employment in the South

Objectives and Procedures: This project is composed of several studies designed to obtain reliable information on the patterns of employment of Negroes in the South, especially their penetration of and occupational distributions in major industries. The causes of these patterns are being analyzed to provide guides for more effective means of promoting the employment and upgrading of Negroes. Each study concerns employment patterns in seven southern cities (Atlanta, Birmingham, Houston, Louisville, Memphis, Miami, and New Orleans) and in selected industries (agriculture, the Federal Government, and State and local governments). Under a separate contract (see **1.1.38**), additional research is being conducted on Federal and construction employment in selected cities. In all cases, major sources are data collected by Federal agencies such as the Equal Employment Opportunity Commission, the Department of Labor, the Civil Service Commission, the U.S. Commission on Civil Rights, the Department of Agriculture, and the Department of Health, Education, and Welfare. These data are being supplemented by data from local agencies and organizations and interviews with spokesmen for these institutions.

Status of Project: Completion of the entire project is scheduled for September 1971. Two of the city studies (Houston and Miami) are expected to be completed by December 1970, and the other individual studies are expected to follow at intervals of approximately 1 month.

1.1.16 BUREAU OF LABOR STATISTICS U.S. DEPARTMENT OF LABOR
WASHINGTON, D.C.

CONTRACT NO. 81–09–70–19

Principal Staff: Sol Swerdloff

Project Title: Survey of Occupational Training in Industry

Objectives and Procedures: In the interest of filling the gap in information on the training activities of the private sector, this pilot project intends to determine: (1) The kinds and quality of training records kept by employers, and the ease with which data can be retrieved; and (2) the feasibility of a periodic data collection program whereby employers maintain a diary of their current training activities.

Information is being sought by mail questionnaires from representative establishments in metalworking and public utilities: A sample of about 400 firms drawn from the recent BLS occupational survey in the metalworking industries; and 100 selected from electric power and telephone industries. About 300 interviews are being conducted. (About 100 visits are being made to metalworking plants and 50 to public utilities installations to verify data reported by mail. To test the feasibility of periodic collection of data, 75 establishments, equally divided between metalworking and public utilities, are being visited twice—the first time to leave reporting forms and the second time to collect and review the responses.)

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[4] The Equal Employment Opportunity Commission is also supporting this project.

The study is expected to yield recommendations on the feasibility of conducting a multi-industry survey of training; the kind of approach to be used; and the feasibility of regular collection of data on current training programs.

Status of Project: Completion is scheduled for June 1971.

1.1.17 LOUISIANA STATE UNIVERSITY NEW ORLEANS, LA.

CONTRACT NO. 81–20–70–20

Principal Staff: Dr. Theresa R. Shapiro, Division of Business and Economic Research

Project Title: Negro Construction Craftsmen in a Southern Labor Market

Objectives and Procedures: This project consists of two parts. The first phase, based on published sources, interviews, and a mail questionnaire, is examining the labor market for construction workers in New Orleans. It is focusing on such issues as why there are no Negroes in certain craft unions, whether Negroes outside the unions work in these trades, and what impact the Department of Labor's Apprenticeship Outreach Program has had on the composition of segregated locals. In addition, this phase of the project is assessing the extent to which the New Orleans labor market is representative of the South as a whole.

The second phase of the project, involving interviews with stratified samples of Negro and white construction workers, addresses such questions as: Does integration equalize the work experience of Negro and white members of the same local? Do long-integrated and recently integrated locals differ in this respect? How do segregated locals function? Does a large supply of Negro labor affect union control over jobs? How does the nonunion Negro craftsman fare, as compared with Negro union members of the same craft?

Status of Project: Completion is scheduled for September 1971.

1.1.18 MICHIGAN STATE UNIVERSITY EAST LANSING, MICH.

CONTRACT NO. 81–24–66–32

Principal Staff: Dr. Harvey M. Choldin and Grafton Trout, Rural Manpower Center

Project Title: The Mexican American Migrant Farmworker in Transition

Objectives and Procedures: This study describes the process by which increasing numbers of Mexican American migrant farmworkers drop out of the migrant stream, settle in northern communities, and adjust to new labor force requirements and opportunities. It also identifies factors affecting the settlement and stabilization of migrant workers in selected communities, with attention to occupation and income, to provide policy guidelines for facilitating the transition process.

Interviews were held with 695 migrant heads of households and nearly 50 community leaders in eight Michigan counties outside the Detroit metropolitan area. Information was collected about the migrant's occupational background, motivation for dropping out of the migrant stream, kinship and friendship ties, job aspirations, interests in training and retraining, and community reactions.

Status of Project: Completion is scheduled for August 1970.

Highlights of Preliminary Findings: Most of the Mexican American migrants were found to have settled in Michigan since 1950. The migration and settlement process is proceeding with the aid of kinship ties; namely, with one person or couple who has settled in Michigan helping their relatives move to the same community to join them.

Jobs were the main reason the migrants left their former homes, although they did not have specific information about the kinds of jobs available in Michigan or the type of occupation they desired. Some spent their first full year in Michigan in communities near an area where they did farmwork in the summer and continued into food processing in the winter. The great majority soon moved into middle-sized cities with industrial employment opportunities.

Most of the migrants got jobs by going directly to the employers, or through friends and relatives. Few used public and private employment agencies. The majority were working as operatives and were concentrated in the metal fabrication (mainly foundries) and motor vehicle industries.

A substantial number of the migrants had taken specialized job training, apprenticeship training, adult education classes, or had attended military service schools. Most of the training lasted 6 months or more and was received in Michigan.

One-third of the wives of the migrants in the study were employed and three-fifths of those who were not working had been employed at some time in the past.

The great majority of the migrant families were buying homes, and nearly one-fourth of them owned their houses outright. Typically, the migrants lived in relatively heterogeneous neighborhoods; only one in 10 reported that their neighborhood was mostly Mexican American.

The majority of the heads of migrant households were bilingual. Almost all spoke at least some English, and more adults were able to write English than Spanish.

Most Mexican Americans perceived themselves as occupying a lower middle socioeconomic position in their respective Michigan communities, considerably lower than the average Anglo, but higher than the Negro. Compared with themselves, most adults felt that their children had better opportunities for integration and assimilation. Thus they preferred that their children learn English in school, attend college, and seek professional careers.

1.1.19 MICHIGAN STATE UNIVERSITY
EAST LANSING, MICH.

CONTRACT NO. 81–24–68–42

Principal Staff: Dr. R. F. Cargill, Department of Agricultural Engineering, and Dr. G. E. Rossmiller, Department of Agricultural Economics

Project Title: The Manpower Implications of Mechanization for Fruit and Vegetable Processing

Objectives and Procedures: The objectives of this three-phase project are: (1) To gather technological information on all aspects of fruit and vegetable harvesting; (2) to assess the implications of harvesting mechanization for manpower, the industry, the consumer, and the public; and (3) to recommend policies, programs, and research based on analysis of materials assembled during the first two phases of the project.

In the first phase, the researchers arranged a Technical Seminar on the Implications of Mechanization for Fruit and Vegetable Harvesting, held under endorsement of the American Society of Agricultural Engineers in December 1968. At this seminar 45 agricultural engineers, horticulturists, and agricultural economists presented assigned papers on production technology in the fruit and vegetable industry. The second phase was a Colloquium on the Manpower Implications of Mechanization in the Fruit and Vegetable Industry, held in July 1969, at which rural sociologists, manpower specialists, and industry and labor representatives joined representatives of the disciplines involved in the Technical Seminar. To assist in carrying out the third phase, a Task Force on Manpower met during the colloquium and has continued to work with the researchers in extending the evaluation into the policy phase.

Status of Project: Results of the project are being published in three volumes, of which two have been issued (see **3.1.76** and **3.1.77**). The third is scheduled for publication by October 1970.

Highlights of Preliminary Findings: The papers published in the first two volumes of this study show that the revolution in technology and horticultural practices is proceeding rapidly in fruit and vegetable production, particularly for commodities harvested for processing rather than for fresh or table use. Currently, about 40 percent of the 1 million seasonal farmworkers employed during the peak month are engaged in fruit and vegetable harvesting. The overall demand for harvest labor is expected to decrease by as much as 21 percent between the 1964–68 period and 1975, and changes in the seasonality and skill levels of cultivating and harvesting jobs will profoundly affect the types of workers needed.

Snap beans, potatoes, processing tomatoes, pickling cucumbers, lettuce, and other vegetables are likely to be harvested largely by machines within the next few years. Fruit and nut crops are less adaptable to mechanization, but manpower requirements are expected to go down sharply for such labor-intensive crops as cherries and grapes, and to a lesser extent for pecans, strawberries, and peaches. One cucumber harvester can potentially displace 70 workers, and a five-man crew operating a cherry shaker can displace 150 workers. Many crops that cannot be efficiently mechanized may cease to be grown commercially in the United States.

As these changes occur, demand for skilled year-round workers may expand relative to the need for local seasonal workers, both skilled and unskilled. The need for migratory farm labor as we know it today may decrease considerably. Thus, farmworkers who attempt to remain in agriculture will compete for fewer jobs that require higher skill levels for operating and maintaining sophisticated farm equipment.

Many of the papers in the second volume outline measures for coping with the manpower problems which are envisioned.

1.1.20 MICHIGAN STATE UNIVERSITY
EAST LANSING, MICH.

CONTRACT NO. 81–24–68–45

Principal Staff: Dr. Daniel H. Kruger, School of Labor and Industrial Relations

Project Title: Occupational Licensing in Selected States and Municipalities: Its Implications for Manpower Policy

Objectives and Procedures: This study explores the feasibility of developing statistics on: (1) The extent to which licensing affects the supply of manpower in nonprofessional occupations; and (2) the structure and operations of State, county, and municipal licensing authorities. Information is being gathered from licensing boards and officials in Georgia, Michigan, and Ohio on licensing procedures and requirements, as well as on the numbers of applicants, new licensees, renewals, practicing licensees, and persons who fail licensing examinations.

This research, an outgrowth of a pilot study (see **3.5.09**), complements another current project (see **1.1.09**). Together the two studies are designed to yield information that can be used to make it easier for disadvantaged workers to enter licensed occupations while safeguarding legitimate public interests.

Status of Project: Completion is scheduled for December 1970.

1.1.21 THE UNIVERSITY OF MICHIGAN
ANN ARBOR, MICH.

CONTRACT NO. 81–24–68–33[5]

Principal Staff: Dr. Robert L. Kahn and Dr. J.C. Bachman, Survey Research Center

Project Title: A Study of Youth in High School, at Work and Unemployed

Objectives and Procedures: This project investigates three basic questions: (1) To what extent do differences in the behavior of boys in school, at work, and unemployed reflect established differences in background, attitudes and motives, and/or different environments? (2) Do differences in school environment have an observable effect on the education and social adjustment of adolescent boys? (3) Why do boys leave school before graduation, and what happens to them when they enter the labor market?

Data are being collected through followup studies on boys who were in the 10th grade in 1966 in about 100 schools that make up: (1) A probability sample of the Nation's schools; (2) a small discretionary sample of schools with special characteristics (e.g., vocational schools or schools with Elementary-Secondary Education Act title I funds). An initial sample of over 2,500 boys was interviewed in the fall of 1966; over 2,200 of them were reinterviewed in the spring of 1968; and nearly 2,100 continued to participate in the spring of 1969; and a final followup occurred in late spring and early 1970. Data collection techniques include personal interviews and group-administered tests and questionnaires. Self-administered questionnaires have also been used to obtain information about school organization and environment from principals, counselors, and teachers.

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[5] The U.S. Department of Labor is jointly sponsoring this study, conducted under a University of Michigan contract, with the Office of Education, U.S. Department of Health, Education, and Welfare.

Status of Project: A working paper summarizing data from student interviews through 1969 is scheduled for completion by late summer 1970. For a comprehensive description of the design, purpose, and survey instruments of the study, see J. C. Bachman et al., *Youth in Transition: Volume I—Blueprint for a Longitudinal Study of Adolescent Boys* (Ann Arbor, Mich.: The University of Michigan, Survey Research Center, 1970). A number of additional volumes in the *Youth in Transition* monograph series are scheduled for completion throughout 1971. The project will be completed late in 1971.

Highlights of Preliminary Findings: By 1969 data collection, more than 200 boys were identified as having dropped out and remained out of school. The most frequent reason given for having dropped out, whether temporarily or permanently, was some aspect of the school environment, school personnel, or both. Dropouts were found to be lower than average in school ability, reading skills, and the like. A matched group of "stay-ins" from the same schools and the same socioeconomic levels were also below average; although the differences here were much smaller, the data nevertheless confirmed that dropping out is related to academic ability, after controlling for important aspects of school and family environment. Both before and after dropping out, dropouts reported consistently higher levels of delinquency than the matched group of students who stayed in school.

1.1.22 THE UNIVERSITY OF MICHIGAN
ANN ARBOR, MICH.

CONTRACT NO. 71–24–70–02

Principal Staff: Dr. Malcolm S. Cohen, Department of Economics

Project Title: Planning and Conceptualization of a Labor Market Information System

Objectives and Procedures: As part of a concerted effort to satisfy the requirement in the 1968 Amendments to the Manpower Development and Training Act (section 106) that the Department of Labor develop a comprehensive labor market information system (LMIS), this study focuses on those aspects of the LMIS which are concerned with the generation and dissemination of relevant statistics. (Related studies are described in **1.1.04**, **1.1.08**, and **1.1.41**.) Both the conceptual framework and the methodological implementation of this segment of the LMIS are being assessed in terms of feasibility and the relative costs and benefits of alternative approaches.

Using an interview guide, information is being sought from Department of Labor officials, social workers, economists, school counselors, vocational educators, and personnel directors, as well as other knowledgeable scholars and users of labor market information. Efforts are being made to set up rough goals to be accomplished in the development of LMIS; translate these goals into general tasks and priorities; draft a planning document describing these goals, objectives, and suggested tasks, with rough estimates of costs and benefits of alternative approaches to the problem; and prepare a rough cataloging of the kinds of data bases which might enter into an LMIS. Account is being taken of the compatibility of the LMIS with Department of Labor programs such as ESARS (Employment Service Automatic Reporting System), job banks, job vacancy surveys, and job matching.

When the research is completed, consideration will be given to extending the project to cover development of hypothetical models of labor markets assuming varying types and amounts of labor market information.

Status of Project: Completion is scheduled for July 1971.

1.1.23 NATIONAL ACADEMY OF SCIENCES
WASHINGTON, D.C.

CONTRACT NO. 81–09–70–17[6]

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[6] This project is jointly financed by the Department of Labor, the Bureau of the Census, and the Office of Economic Opportunity.

Principal Staff: Dr. Alexander Clarke, Division of Behavioral Sciences

Project Title: Advisory Committee on Problems of Census Enumeration

Objectives and Procedures: This project helps support the research activities of the Academy's 15-member Advisory Committee on Problems of Census Enumeration. This Committee was established in May 1969 to study the problems underlying deficiencies in coverage in the censuses of population and in current surveys and to recommend measures and procedures that promise to reduce or mitigate these problems. It is anticipated that the Committee will provide a series of interim reports on its investigations, as well as an overall report on its activities and recommendations.

Status of Project: Completion is scheduled for October 1971.

1.1.24 NATIONAL MANPOWER POLICY TASK FORCE
WASHINGTON, D.C.

CONTRACT NO. 81–09–66–31

Principal Staff: Dr. Charles A. Myers and Dr. Sar A. Levitan

Project Title: Identifying Needs and Priorities in Manpower Research

Objectives and Procedures: Working closely with government and the research community, the Task Force reviews current manpower information and assesses it in relation to the need for new and changing manpower policies, programs, and research. Special papers and reports are being prepared on priority policy issues.

Status of Project: Reports are published as they become available (see **3.1.97–101**). Reports completed during fiscal year 1970 are summarized elsewhere in this volume (see **2.1.18**).

1.1.25 NATIONAL PLANNING ASSOCIATION
WASHINGTON, D.C.

CONTRACT NO. 81–09–68–36

Principal Staff: Dr. Leonard A. Lecht

Project Title: Research on the Universe of Need and on Manpower Requirements for National Programs

Objectives and Procedures: This study consists of three major elements:

1. Developing national estimates of the "universe of need" through 1975; i.e., the numbers of persons who could benefit from Federal manpower programs and other supportive services (for example, the long-term unemployed, low-wage workers, part-time workers, the disabled, and those not in the labor force because they believe that jobs are not to be found). The estimates are being classified by such characteristics as age, sex, level of education, and present or last occupation.
2. Identifying and analyzing, in relation to the above categories, the manpower implications of current and proposed legislation and various national programs.
3. Estimating the number of jobs for members of minority races that would result per billion dollars of expenditures on various national priority programs, building on the NPA's recently completed study, *Manpower Requirements for National Objectives in the 1970's* (see **3.1.107**).

Status of Project: Completion is scheduled for August 1970.

Highlights of Preliminary Findings: The overall conclusions are as follows:

1. Nearly 7.9 million persons in the 16- to 64-year-old age group who were at work or looking for work in 1966 were poor—the largest group in the universe of need. This total is expected to fall to slightly more than 5 million in 1975 as a result of growth in gross national product, expected to average 4.4 percent a year (in constant dollars), together with a continuation of the recent levels of programs for remedying poverty.
2. In 1966, this group was predominantly employed in year-round jobs, and they are expected to continue as the largest component of the universe of need through 1975. Over two-fifths of the poor persons in the labor force in 1966 worked at full-time jobs for 50 weeks or more during the year.

3. An additional 2 million poor persons who were not in the labor force in 1966 are also probably potential candidates for manpower training. These include handicapped workers who could be rehabilitated, discouraged jobseekers who wish to work, women now receiving public assistance who would work if adequate child care were available, and an estimated 600,000 poor persons who were missed because of incomplete coverage in the 1960 decennial census.

4. There is a major imbalance in the dimensions of the universe of need and the job training available to its members. Total enrollment in the federally supported programs primarily concerned with job training in 1966 amounted to about 4 percent of the universe population.

5. Increasing the earning capacity of more disadvantaged persons through job training will involve both an expansion in the manpower training programs and a substantial enlargement of the services which support training, such as remedial education or child-care programs. In spite of the rapid increases in the level of educational attainment in the past decade, for example, 2.8 million persons in the universe of need had completed 8 years or less of school.

1.1.26 NATIONAL PLANNING ASSOCIATION
WASHINGTON, D.C.

CONTRACT NO. 81–09–70–16

Principal Staff: Dr. Leonard A. Lecht

Project Title: Research on the Manpower Implications of New Legislation and New Federal Programs

Objectives and Procedures: This project is analyzing the manpower implications of current legislative proposals for national programs so that manpower considerations may help shape national policies. For each program area studied, information is being developed on such factors as the manpower required to supply the proposed services and the significance of these requirements for priorities in manpower policies and programs (for example, the effects on bottleneck occupations, opportunities for employing the disadvantaged, occupational training needs, and employment generated by the programs).

Status of Project: Completion is scheduled for April 1971.

1.1.27 NEW YORK UNIVERSITY
NEW YORK, N.Y.

CONTRACT NO. 81–34–69–16

Principal Staff: Dr. David Rogers, Graduate School of Business Administration

Project Title: Interorganizational Relations and Inner-City Manpower Programs

Objectives and Procedures: This is a pilot effort to develop a set of propositions about how particular organizational forms and interorganizational forms affect the delivery systems of inner-city manpower programs for the disadvantaged. It extends an exploratory study by the researcher (see **2.1.06**). Through case studies of program administration experiences in New York, Cleveland, and Philadelphia, attempts are being made in the present study: (1) To identify and analyze the most successful and unsuccessful organizational relationships within and between various manpower agencies and between such agencies and other political and social agencies also concerned with the delivery of manpower services; (2) to develop indicators characterizing such relationships; and (3) to develop model optimum organizational designs applicable to other urban areas.

Status of Project: Completion is scheduled for October 1970.

1.1.28 NEWARK COLLEGE OF ENGINEERING
NEWARK, N.J.

CONTRACT NO. 81–32–69–14

Principal Staff: Dr. Robert Kiehl, Foundation for the Advancement of Graduate Study in Engineering

Project Title: Opportunities for Blacks in the Profession of Engineering

Objectives and Procedures: This study, building on two previous surveys by the researcher, seeks data on educational and employment opportunities for Negroes in engineering, as a basis for policies concerning student support and career guidance for Negro youth. Eight hundred professional engineering schools and technical institutes have been surveyed for information on their Negro enrollment. One-fourth of the 1968 Negro graduates of these schools were sent questionnaires about the type of training received, areas of specialization, number of job offers on graduation, current job duties and salary, relation of the job to education or training, and possibilities for advancement.

Status of Project: Completion is scheduled for October 1970.

Highlights of Preliminary Findings: Although there appear to be good employment opportunities for black engineers and technicians, the number of Negro graduates in these areas is small. Approximately 2 percent of the Nation's engineering students are black; close to half of these attend predominantly Negro colleges. Blacks account for almost 5 percent of the total in technician programs.

Many black engineering and technician students have had poor mathematics and science preparation in high school, as well as inadequate counseling. New programs of recruiting, tutoring, and counseling are being developed by some colleges to bring more Negroes into engineering.

In this study, the Negro engineering and technician graduates reported average annual incomes of $10,360 and $7,500, respectively. The engineers received an average of eight job offers upon graduation; the technicians, three. Although most black engineers and technicians expressed satisfaction with their jobs, many were concerned with "showcasing."

1.1.29 THE OHIO STATE UNIVERSITY RESEARCH FOUNDATION

COLUMBUS, OHIO and

BUREAU OF THE CENSUS
U.S. DEPARTMENT OF COMMERCE
WASHINGTON, D.C.

CONTRACT NOS. 81-37-69-15
81-37-70-18[7]

Principal Staff: Dr. Herbert S. Parnes, Center for Human Resources Research, The Ohio State University; and Demographic Surveys Division, Bureau of the Census

Project Title: National Longitudinal Studies of the Labor Force Behavior of National Samples of Men (45–59), Women (30–44), and Male and Female Youth (14–24)

Objectives and Procedures: This study, which began in 1966 and will cover a 5-year period, is probing the relationship among factors that influence the work behavior and experience of four groups: Young men and women, aged 14 to 24; men, aged 45 to 59; and women, aged 30 to 44. Whereas available data single out some important correlates of the job difficulties of these groups (e.g., inadequate education), the present study focuses on the interaction among economic, sociological, and psychological variables that permits some members of a given age-education-occupation group to have satisfactory work experiences while others do not. The completed study will constitute a comprehensive body of data on labor mobility for the above segments of the labor force.

This study contemplates six consecutive surveys (mostly by interview) of each group at 1-year intervals, except for the older groups of men and women in 1970. The initial surveys were conducted in 1966 for both groups of men, in 1967 for the women aged 30 to 44, and in 1968 for the women aged 14 to 24. The Bureau of the Census draws the samples and collects and tabulates the data.[8] Ohio State prepares the data-collection schedules, plans the tabulations, analyzes the results, prepares reports on the annual surveys, and will write a final comprehensive report for each group.

Status of Project: Fourteen annual surveys have been conducted by the Bureau of the Census: Four for each group of men and three for each group of women.

All of the annual reports on this study are being reproduced as Manpower Research Monographs. The four received thus far are listed as items **3.1.121** through **3.1.123**. The two reports received during fiscal year 1970 are summarized in item **2.1.24**; those completed during fiscal year 1969 were summarized in *Manpower Research Projects* for that year.

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[7] Formerly 81-37-68-21, 81-08-38, and 81-34-28.

[8] Data tapes from this study are available at cost from the Demographic Surveys Division of the Bureau of the Census.

1.1.30 OKLAHOMA STATE UNIVERSITY OF AGRICULTURE AND APPLIED SCIENCE, RESEARCH FOUNDATION
STILLWATER, OKLA.

CONTRACT NO. 81-38-69-19

Principal Staff: Dr. David W. Stevens, Department of Economics

Project Title: The Effects of Supplemental Labor Market Information in Encouraging Self-Initiated Job Finding

Objectives and Procedures: An outgrowth of another Manpower Administration contract (see **1.3.06**), this study is exploring whether registrants at public employment offices who are provided with supplemental labor market information will more often find jobs on their own and what personal characteristics are associated with success in using the information. The study is also working out detailed procedures to adapt successful experimental methods for use in normal operations throughout the public employment service.

Each registrant in an experimental group is being given a special package of services and information; for example, a job search plan, counseling on jobseeking techniques and job-finding strategy, and information on possible job openings related to his work experience and interests. Members of both the experimental group and a control group of registrants receiving only standard services are being interviewed to obtain the following data: Use of information by recipients and any others; number of employer contacts made; duration of unemployment after registration; sources of other information used; source of information leading to employment; earnings in the job secured; and stability of postregistration employment. Information on receptivity to the approach is also being obtained from participants, employment service personnel, and selected employers.

Status of Project: Completion is scheduled for January 1971.

1.1.31 OPTOMETRIC CENTER OF NEW YORK
NEW YORK, N.Y.

CONTRACT NO. 81-34-70-11

Principal Staff: Dr. Alden H. Haffner

Project Title: A Study of the Present Utilization and Projected Need for Paraprofessional Personnel in Optometry

Objectives and Procedures: As a basis for providing meaningful job opportunities for the disadvantaged in health occupations, this study is investigating the current number, duties, and education and training of ancillary optometric personnel and the projected need for such employees. The study is further determining the type of formal training program required to meet the increased public demand for quality vision care and create career ladders for technical occupations in optometry.

A stratified sample of the Nation's practicing optometrists is being surveyed by mailed questionnaires. Questions are designed to determine the present and potential utilization of ancillary optometric personnel and to reveal the relation of specific job tasks to requisite levels of education and training and capacity for independent action. This information, in turn, should permit the grouping of job tasks into various job descriptions.

Status of Project: Completion is scheduled for December 1970.

1.1.32 THE PENNSYLVANIA STATE UNIVERSITY
UNIVERSITY PARK, PA.

CONTRACT NO. 81-40-68-12

Principal Staff: Dr. James S. Holt, Department of Agricultural Economics and Rural Sociology

Project Title: The Agricultural Labor Force and Labor Market in the Northeastern States

Objectives and Procedures: This study is assessing the adequacy of the farm labor force in 12 Northeastern States (Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, and West

Virginia) to meet current and expected farm employment needs.

The analysis takes into account data on the farm labor force, patterns of labor use, ongoing and expected technological changes, the demographic characteristics of current and potential farmworkers, and the institutional framework for matching workers, and supply and demand are being made for major estimates of agricultural commodities, different types of workers, and major job market areas. The study is also analyzing the statistics on farm employment in terms of coverage, frequency, compatibility of concepts, measurement techniques, and reliability of data.

Status of Project: Completion is scheduled for August 1970.

1.1.33 THE PENNSYLVANIA STATE UNIVERSITY
UNIVERSITY PARK, PA.

CONTRACT NO. 81–40–70–06

Principal Staff: Dr. Louis Levine and John H. Norton, Institute for Research on Human Resources

Project Title: Simulated Urban Area Manpower Data System for Manpower Program Planning and Management

Objectives and Procedures: This project seeks to conceptualize a central coordinated manpower information system for an urban area by using data contained in the operating records of, or derived from the services rendered by, local human resource and manpower agencies. The major purposes to which the information system is directed are manpower program planning; identification and analysis of manpower services and operations; management and supervision of manpower staff resources and facilities; evaluation of performance; and budget management, including development of budget requirement and cost-effectiveness analyses.

The project is intended to yield a comprehensive body of information on the design, structure, content, and technology of a central manpower data bank. It is expected to assess the feasibility of such a program through investigation of the possible acceptance of and participation in a central manpower data bank by local agencies and through testing common definitions, simulated reporting forms, instructions, and schedules.

Status of Project: Completion is scheduled for March 1971.

1.1.34 UNIVERSITY OF PENNSYLVANIA
PHILADELPHIA, PA.

CONTRACT NO. 81–40–69–13

Principal Staff: Ann R. Miller, Population Studies Center

Project Title: The Relationship Between Occupational Classification Systems of the Bureau of Employment Security[9] and the Bureau of the Census and Development of a Standard Occupational Classification

Objectives and Procedures: This study is an important component of the work to improve the occupational classification systems used by the Federal Government and to develop a standard occupational classification system. Its purpose is the analysis of data recently developed by the Census Bureau for the Interagency Occupational Classification Committee. These data make possible the comparison of many social and economic characteristics of persons classified by the two major occupational classification systems in use today—that of the Census Bureau and the USTES system as reflected in the *Dictionary of Occupational Titles.* Findings of this study will help to develop measures of convertibility between the two systems and facilitate development of a standard occupational classification system.

Status of Project: Completion is expected in November 1970.

1.1.35 PLANNING RESEARCH CORPORATION
WASHINGTON, D.C.

CONTRACT NO. 81–05–68–06

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[9] Presently the U.S. Training and Employment Service.

Principal Staff: Dr. Norman H. Jones and Dr. Allan H. Muir

Project Title: Cost-Benefit Program Supportive Services

Objectives and Procedures: This study seeks to develop improved methods and data for measuring the costs and effectiveness of manpower programs. Attempts are being made to: (1) Analyze the data developed in the contractor's previous study of on-the-job and institutional training programs; (2) develop a method and sampling technique for using social security data on employment and earnings to measure the benefits of training; (3) devise a technique whereby the Manpower Administration can determine the optimum investment in a particular individual, given his age, education, skills, attitudes, etc.; (4) formulate a consistent structure of goals and subgoals for programs oriented toward the disadvantaged, devise a cost-goal study to explore the best mix of manpower services for the disadvantaged, and calculate the cost-goal curve, insofar as data permit; and (5) investigate the data required for and the relative usefulness and desirability of different approaches to cost-effectiveness analysis of manpower programs; for example, the use of sample versus universal data, one-time versus continuous studies, and cross-sectional versus longitudinal studies.

Status of Project: Completion is scheduled for September 1970.

1.1.36 TEMPLE UNIVERSITY
PHILADELPHIA, PA.

CONTRACT NO. 81–40–69–20

Principal Staff: Dr. Kenneth McLennan and Dr. Paul Seidenstat, Department of Economics

Project Title: Employment Implications of Firms Entering and Leaving An Urban Labor Market

Objectives and Procedures: This project investigates the effects of business movement into, out of, and within the city limits on employment in selected geographic sectors of a major city, Philadelphia. The study traces the employment effects—particularly on access to job opportunities by inner-city residents—by occupation, type, and characteristics of industry in low-income and high-income sectors. The occupational and skill characteristics of employees are being compared for entering and leaving firms. The study also analyzes the effects of plant relocation on overall employment and unemployment trends in Philadelphia, on sources of workers and commutation patterns, and on the occupational structure of employment within the city.

Data are being obtained from firms which, during 1967: (1) Entered or left the central city, (2) changed location within the central city, and (3) entered or left a suburban county within the Philadelphia area.

Status of Project: Completion is scheduled for September 1970.

1.1.37 TEXAS A. & M. UNIVERSITY
COLLEGE STATION, TEX.

CONTRACT NO. 81–46–68–16

Principal Staff: Dr. Paul Miller, Department of Economics

Project Title: The Role of Farm Labor Market Institutions in the Lower Rio Grande Valley of Texas

Objectives and Procedures: This study analyzes the employment patterns of farm labor in the Lower Rio Grande Valley of Texas, where there is a decreasing demand for unskilled farm labor, increasing mechanization, an uncertain supply of trained agricultural technicians, a high proportion of generally unskilled minority group members (primarily Mexican Americans), and relatively heavy dependence on farm employment. This study attempts to identify and determine the causes of the farm labor force's unemployment, underemployment, and mobility and to isolate factors—particularly those related to labor market institutions—hindering job market adjustments. The study also considers problems resulting from the migration of farmworkers from the Valley to other parts of the country for seasonal farm employment.

Information has been obtained from present and former farmworkers; crew leaders and employers; and community, business, labor, and government leaders.

Status of Project: The project is scheduled for completion in September 1970.

1.1.38 THE UNIVERSITY OF TEXAS AUSTIN, TEX.

CONTRACT NO. 81–46–70–24

Principal Staff: Dr. F. Ray Marshall, Department of Economics

Project Title: Negro Employment in the South: The Federal Service and the Construction Industry

Objectives and Procedures: This two-part study expands the researcher's earlier study of Negro employment patterns in the South (see **1.1.15**). The first component of the present study is an examination of patterns of Negro employment in the Federal service in 13 States and 24 metropolitan areas of the South; the second, a pilot examination of patterns of employment among Negro construction contractors in two southern cities, Atlanta, Ga., and Houston, Tex.

The Federal service study is adding to the information obtained in the earlier study the 1969 data now available from the Civil Service Commission and collecting more detailed information through field interviews.

The construction industry study is designed to determine the feasibility of a larger scale study. In the initial effort, approximately 100 interviews are being conducted in Houston and Atlanta with selected civil rights and union leaders, Negro and white contractors, and others with construction industry experience to explore such areas as patterns of employment and training of black journeymen, the role of black contractors in various sectors of the industry, and the experience and attitudes of black apprentices and helpers.

Status of Project: Completion of both studies is scheduled for September 1971.

1.1.39 THE URBAN INSTITUTE WASHINGTON, D.C.

CONTRACT NO. 82–09–68–44

Principal Staff: Dr. Charles C. Holt, Dr. C. Duncan MacRae, Dr. Stuart O. Schweitzer, and Dr. Ralph E. Smith

Project Title: Labor Markets, Inflation and Manpower Programs

Objectives and Procedures: The objective of this research is to gain a better understanding of the functioning of labor markets and the impacts of manpower programs on inflation and unemployment.

The research is organized in four sets of tasks: (1) Construction of a broad analytic framework for relating inflation, unemployment, upgrading, and manpower programs. (2) Specific theoretical and empirical studies that are needed before attempting to deal with the labor market as a whole. These include the composition and duration of unemployment, cyclical fluctuations of labor productivity, the dynamics of labor turnover, the relationship between vacancies and unemployment, the influence of the regional composition of unemployment on aggregate wage change, and wage change processes. (3) Building and estimating a model of the national labor market that attempts to take into account the major employer-employee relationships and to incorporate the parameters that can be influenced by policy actions. The following variables will probably be included: Quits, layoffs, job changes, retirements, new hires, entry into and exit from the labor market, vacancies, overtime, production, inventories, order backlog, productivity, and union and nonunion wage levels. (4) Exploratory analyses of several policy issues utilizing the work above: Impact of manpower programs on unemployment, inflation, and upgrading; interaction between manpower programs and the level of aggregate demand; and implications for program evaluation and planning.

Status of Project: This project, which is a continuation of earlier research supported by the Manpower Administration, has involved several published papers and reports, as indicated below. A summary report will be available in 1972.

Highlights of Preliminary Findings: Publications include: (1) "Job Search, Phillips' Wage Relations and Union Influence, Theory and Evidence" (see **3.1.158**). A Phillips relation between inflation and unemployment is developed from the job search-turnover theory of the labor market, including consideration of collective bargaining threats. This theory is tested against the empirical studies. (2) "How Can The Phillips Curve Be Moved to Reduce Both Inflation and Unemployment?" (see **3.1.158**) and "Improving the Labor Market Trade-Off Between Inflation and Unemployment" (see **3.1.158**). These papers examine the impacts that changes in labor market behavior would have on inflation and unemployment. (3) *Inflation, Unemployment and Manpower Policy* (see **3.1.158**). This short book is a nontechnical exposition of present knowledge on the relationships between unemployment, inflation, and manpower policy.

In addition, two working papers are scheduled to appear in *Hearings before the Joint Economic Committee, Subcommittee on Economy in Government, National Priorities (June 1–18, 1970)*. One finds that the additions to discounted lifetime earnings associated with completion of high school for specific occupations are not uniformly large; some are, in fact, negative. This observation suggests why the dropout rate from high schools is high, in spite of the finding that the *average* return from completion of high school is large. The second presents an analytical model which may be used to estimate the earnings which trainees in a manpower program would have received during the training period had they not chosen the training. The model is applied to the estimation of costs associated with institutional training under the Manpower Development and Training Act.

1.1.40 URBAN RESOURCES, INC.
NEW YORK, N.Y.

CONTRACT NO. 82–34–70–17

Principal Staff: Dr. Sol Chaneles and Dr. Kenneth J. Lenihan

Project Title: Research-Demonstration Project—Patterns of Recidivism and Financial Aid

Objectives and Procedures: This project is investigating whether furnishing financial aid to newly released prisoners will provide them with incentives to find jobs, help them maintain steady employment, and reduce the commission of new offenses. The project is based on evidence that pressing unemployment and financial problems may contribute directly to high recidivism rates of certain ex-offenders in the 6 months following release.

Contingent on the outcome of a 6-month pilot test using 25 subjects, 400 inmates who are being released will be randomly selected and assigned to a control group or to one of three experimental groups. Members of one experimental group will receive, each week they are unemployed, an amount equal to the prevailing weekly unemployment compensation payment in their area for a period not to exceed 13 weeks. A second group will receive this payment and also intensive job placement assistance. The third experimental group will receive only job placement assistance. When members of a group receiving financial aid become employed, they no longer receive the special weekly assistance payments but a reduced weekly incentive payment of up to $25 a week based on a predetermined formula. Control group members are to receive none of the financial assistance accorded the experimental groups, but they will receive token payments for the time taken by monthly interviews.

Interviews are being conducted with ex-prisoners and employers to get information on the following subjects: Method of job search; attitudes toward work; employment experiences, including patterns of vertical and horizontal job mobility; the incidence and circumstances of recidivism; personal and social behavior, including legal and civil problems; spending and consumption patterns; and motivations for leading a more conventional life. A limited number of case histories will be developed to present a relative and longitudinal view of what it meant to be a participant in this social experiment.

Status of Project: Completion is scheduled for April 1972.

1.1.41 UNIVERSITY OF WISCONSIN
MADISON, WIS.

CONTRACT NO. 71–53–70–01

Principal Staff: Dr. George P. Huber, Department of Business and Industrial Engineering

Project Title: Job Bank: A Case Study of a Manpower Program

Objectives and Procedures: This study focuses on the Job Bank, which is an integral part of the comprehensive labor market information system the Department of Labor is required to establish under section 106 of the 1968 Amendments to the Manpower Development and Training Act (see **1.1.04, 1.1.08,** and **1.1.22**). Job Bank is a computer-assisted system of job-order development, distribution, and control, now in use on an experimental basis by the public employment service. The system provides all counselors and placement interviewers in the State employment service and cooperating agencies within a given metropolitan area with daily listings of job openings known to the employment service or these agencies. Fifty-six cities had implemented Job Banks by June 30, 1970.

The purpose of this research is to collect and analyze performance data pertaining to the Job Bank program and to assess their implication for the decision-making process and the direction and structure of the program. The data being gathered reflect the effects and distinguishing characteristics of individual Job Banks. In addition, the researcher is feeding back his findings to Job Bank administrators and analyzing the manner in which this feedback affects decisions by the administrators.

Status of Project: Completion is scheduled for August 1972.

1.1.42 YALE UNIVERSITY
NEW HAVEN, CONN.

CONTRACT NO. 81-07-69-22

Principal Staff: Dr. M. Harvey Brenner, School of Medicine

Project Title: Time-Series Analyses of the Relationship Between Selected Economic and Social Indicators

Objectives and Procedures: This study seeks to identify major individual and social correlates and consequences of short-term and long-term changes in employment, unemployment, and earnings. It focuses on the impact of such changes on health and medical care, family life, demographic change, and crime and correction, in New York State and the United States as a whole.

Techniques of time-series analysis and comparative historical analysis are being used to identify and measure the significant effects of changes in the economic indicators on the social indicators, establish the timing pattern of the relationships, and develop methods for anticipating the impact of potential trends and fluctuations in the economic indicators.

Status of Project: Completion is scheduled for August 1970.

1.2 PROJECTS ACTIVE ON JUNE 30, 1970—Research Contracts Under the Economic Opportunity Act (EOA) and the Social Security Act (SSA)[10]

The Economic Opportunity Act of 1964 and the Social Security Act, as amended in 1967, authorize studies to improve the overall effectiveness of several manpower programs.[11] Following are brief explanations of the programs on which research in this section is based.

CONCENTRATED EMPLOYMENT PROGRAM

Each CEP covers a clearly defined geographic area, usually an urban slum neighborhood or an impoverished rural area. The CEP is a coordinating mechanism designed to combine individual manpower programs (such as those listed below and standard MDTA training projects) into a comprehensive system of services and to concentrate the impact of these programs in the area. The CEP provides training and supportive services to disadvantaged persons so they can obtain steady, decently paid employment.

JOB OPPORTUNITIES IN THE BUSINESS SECTOR PROGRAM

Under leadership of the National Alliance of Businessmen, the JOBS Program enlists private industry in employing and training the hard-core unemployed in the Nation's 131 largest cities. The Department of Labor repays employers for the extra costs of the intensive training and supportive services required to employ and retain the hard-core unemployed.

NEIGHBORHOOD YOUTH CORPS

The NYC program has had three separate components for youth from low-income families: (1) An in-school program designed to help them stay in school by providing financial assistance through work, coupled with counseling and, when necessary, related remedial education and vocational training; (2) an out-of-school program intended to increase the employability of unemployed youth by providing the work experience, counseling, remedial education, and training that will enable them to return to school or will lead to further training and/or full-time employment; and (3) a summer program designed to encourage high school students and potential dropouts, through financial assistance from jobs, to return to school in the fall.

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[10] Requests for information concerning these contracts should be directed to the principal staff.

[11] For details, see GUIDELINES FOR SUBMISSION OF RESEARCH PROPOSALS—Research Contracts (section 4.1).

NEW CAREERS IN HUMAN SERVICES [12]

Through on-the-job and classroom training, this program prepares disadvantaged adults for paraprofessional jobs in public and private nonprofit agencies in such critically undermanned fields as health, education, welfare, neighborhood redevelopment, and public safety.

WORK INCENTIVE PROGRAM

The WIN Program seeks ultimately to restore to economic independence all employable persons 16 years of age and over in families receiving Aid to Families with Dependent Children (AFDC). Referrals by welfare agencies to WIN manpower services proceed under three priorities: (1) Suitable jobs, on-the-job training, and/or supportive services are provided for persons identified as job ready; (2) work orientation, basic education, skill training, and work experience are provided for persons who can be made job ready; and (3) for the rest, whose potential for training and regular employment is reassessed every 3 months, special work projects are arranged by agreements with public or private nonprofit agencies. To provide an incentive for work, no deduction is made from welfare benefits for specified amounts of earnings or training allowances.

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[12] Formerly called the New Careers Program, this activity is now one of the four components of the new Public Service Careers (PSC) program. This program was created to secure, within merit principles, permanent employment for the disadvantaged in public service agencies and to stimulate upgrading of current public sector employees. The purpose is to meet manpower needs of public agencies while expanding jobs for the disadvantaged. In addition to the New Careers in Human Services part of the program, there are three employment and upgrading programs—in State, county, and local governments, in agencies receiving Federal grants-in-aid, and in the Federal service.

1.2.01 BOSTON UNIVERSITY
BOSTON, MASS.

CONTRACT NO. 51–23–70–04

Principal Staff: Dr. Robert Chin, Psychology Department

Project Title: Impact of Employment of Disadvantaged on Industrial Organizations

Objectives and Procedures: This project is investigating the effects of employment programs for the disadvantaged on three different types of organizations —a transportation company, a manufacturer, and a service company. In case studies, the ways in which companies attempt to deal with these new workers, the intra-organizational processes which occur in this adaptation process, and the perception of these changes by various people in the company are being examined. Data are being gathered largely through individual and group interviews, supplemented by questionnaires. The findings, integrated with existing knowledge about the social psychology of organizations, will be used to delineate the nature and solution of some of the problems associated with employing the disadvantaged and to derive hypotheses for later empirical testing.

Status of Project: Completion is scheduled for June 1971.

1.2.02 THE BROOKINGS INSTITUTION
WASHINGTON, D.C.

CONTRACT NO. 51–09–69–02

Principal Staff: Dr. Leonard H. Goodwin

Project Title: The Work Orientations of Welfare Recipients Participating in and Eligible for the Work Incentive (WIN) Program

Objectives and Procedures: This project was designed as a two-phase effort, a 9-month feasibility study followed by an additional 9-month expanded full-scale investigation. It is testing the following hypotheses: (1) There are differing patterns of work orientation among chronically unemployed and underemployed persons; (2) certain work orientation patterns of these persons are similar and others dissimilar to those of regularly employed persons; (3) the effectiveness of public policies and programs regarding the training and job placement of poor persons could be increased by a knowledge of their patterns and how they compare with patterns held by persons who are regularly employed.

In phase I, personal interviews were conducted with a national sample of 1,400 WIN participants selected from six different urban sites, an additional 175 WIN trainees in Baltimore, and 600 families in Baltimore in which the father had been regularly employed. Insights were sought which might explain: (1) Individual goals in life; i.e., what is desired both from life and from work; (2) beliefs as to how goals are expected to be fulfilled; (3) attitudes toward work; and (4) plans in regard to work.

Based on the results of phase I, the phase II design is including additional interviews with 700 WIN trainees; 700 WIN trainees who have left the program; 233 WIN staff members; 233 employment service personnel not involved in the WIN Program; and 300 suburban middle-class Baltimore families who are not on welfare or involved in the WIN Program. Data collected from the last three groups will be used to investigate their own perceptions of work and will be compared with similar data collected from the WIN trainees for significant differences.

Status of Project: Completion of the entire project is scheduled for February 1971.

Highlights of Preliminary Findings: WIN trainees were found to have as strong a desire as members of working families to find self-development through work. There was no indication that WIN trainees reject the American "work ethic" any more or less than members of the regular work force. WIN trainees did, however, differ from the comparison groups on the acceptability of government support if one cannot earn enough money to support one's family. Whites strongly rejected this orientation, WIN trainees found it acceptable, and outer-city blacks fell in between.

WIN trainees were much more insecure about their ability to achieve job success than outer-city whites. Outer-city blacks, however, showed the highest insecurity of all. Perhaps the most unexpected finding has been that those WIN trainees and outer-city blacks with the highest self-development desire also tended to have the highest insecurity. For whites there was no such relationship. Insecurity seemed to be a dominant theme in the work orientation of only outer-city blacks and WIN trainees.

One of the most significant findings for the WIN Program is that enrollees' work orientations diverge widely from WIN staff perceptions of enrollees' work orientation. WIN staff were found to have systematically underestimated the positive work orientation of WIN trainees.

1.2.03 THE BUREAU OF SOCIAL SCIENCE RESEARCH, INC.
WASHINGTON, D.C.

CONTRACT NO. 51-09-70-02

Principal Staff: Dr. Leonard H. Goodman and Mrs. Laure M. Sharp

Project Title: Employment Contexts and Disadvantaged Workers

Objectives and Procedures: This project, which builds upon the results of an earlier feasibility study (see **2.2.02**), will profile and analyze the dynamics of successful company programs for orientation and accommodation of employees from the Work Incentive Program (WIN). The study is investigating: (1) The norms and expectations which regulate the employee role—such as punctuality, attendance, relationships with others, and productivity; (2) the limits of tolerance with respect to such norms, sanctions imposed, and differential enforcement between the disadvantaged and other workers; (3) special provisions which employers have made to facilitate incorporating WIN clients into their work forces; (4) channels of employer-employee communications; (5) attitudes of employers and supervisors toward the personal, social, cultural, and work characteristics of WIN clients; (6) changes in attitudes as experience with WIN clients is gained; (7) employer evaluations of the job performance of WIN clients; and (8) employers' perceptions and definitions of the problems involved in incorporating WIN clients into their work forces.

The research is being conducted in 15 cities. Interviews are being conducted in 300 establishments with executive staff and first-line supervisors. Interviews are also being held with at least 300 WIN clients who have terminated their employment with the establishments to study some of the unsuccessful aspects of the company/worker employment accommodation.

Status of Project: The study is scheduled for completion in July 1971.

1.2.04 CASE WESTERN RESERVE UNIVERSITY
CLEVELAND, OHIO

CONTRACT NO. 51-37-69-11

Principal Staff: Dr. Sumati Dubey, School of Applied Social Sciences

Project Title: Decisionmaking in the WIN Program

Objectives and Procedures: This project is one of three longitudinal studies sponsored by the Manpower Administration (see also **1.2.05** and **1.2.21**) to explore the nature and effects of decisions by which men and women receiving Aid to Families with Dependent Children are enrolled in the Work Incentive Program (WIN). Since appropriate decisions are vital, the three investigations are seeking ways of strengthening the decisionmaking process vis-à-vis the development of policy, selection of job opportunities, and counseling of potential WIN participants, especially as these relate to the training of WIN staff.

This study examines WIN decisionmaking in Cuyahoga County, Ohio. (See **1.2.05** for a description of the entire project.)

Status of Project: Completion is scheduled for July 1971.

1.2.05 UNIVERSITY OF CHICAGO
CHICAGO, ILL.

CONTRACT NO. 51-15-69-08

Principal Staff: Dr. William J. Reid, School of Social Service Administration

Project Title: Decisionmaking in the WIN Program

Objectives and Procedures: This project is one of three studies sponsored by the Manpower Administration (see also **1.2.04** and **1.2.21**) to explore the nature and effects of decisions by which men and women receiving Aid to Families with Dependent Children are enrolled in the Work Incentive Program (WIN). Since appropriate decisions are vital, the three investigations are seeking ways of strengthening the decisionmaking process vis-à-vis the development of policy, selection of job opportunities, and counseling of potential WIN participants, especially as these relate to the training of WIN staff.

Under the leadership of the University of Chicago, investigators working on the three studies are developing coordinated plans to assure comparability of research design and methodology. The University of Chicago is studying the WIN Program in Cook County, Ill.; the University of Michigan, in Wayne County, Mich.; and Case Western Reserve University, in Cuyahoga County, Ohio.

In each study, interviews are being conducted with: (1) A representative sample of WIN enrollees at four points in time—at referral to WIN, during enrollment, at placement, and after placement; (2) a sample of 50 caseworkers referring clients to WIN about the circumstances leading to their referrals of clients, and the reasons for referral, their role in the process, and their assessment of the client's motivation for accepting; and (3) selected members of the WIN team, about the circumstances prompting them to place the client in a particular program. In addition, regional, political, social, and administrative circumstances that affect decisionmaking processess are being investigated, and the training and backgrounds of the social workers are being examined.

Status of Project: Completion is scheduled for August 1971.

1.2.06 CORNELL UNIVERSITY
ITHACA, N.Y.

CONTRACT NO. 51–34–69–07

Principal Staff: Dr. Harold Feldman, Department of Child Development and Family Relationships

Project Title: A Study of the Effects on the Family Due to Employment of the Welfare Mother

Objectives and Procedures: This study investigates the consequences of a welfare mother's entering employment on the operation of her home, the care of her children, her use of community resources, and her self-perception. A sample of 1,200 families (in a city of less than 100,000) is being selected to permit comparisons between families in otherwise similar circumstances where: (1) The husband is or is not in the home; (2) the mother is or is not employed; and (3) the family has or has not left the welfare rolls.

Each family is being interviewed twice, 6 months apart, and intensive case studies are to be made of a sample of persons who leave jobs or welfare or otherwise change their status in the interim. In addition, information is being obtained on community facilities for transportation, child care, education, recreation, counseling, and health care.

Status of Project: At least 80 percent of the survey interviews are now completed and work has been initiated on the other phases. A number of case studies also are underway. Completion is scheduled for December 1970.

1.2.07 EDUCATIONAL TESTING SERVICE
PRINCETON, N.J.

CONTRACT NO. 41–9–005–32

Principal Staff: Dr. Norman E. Freeberg, Developmental Research Division, and Dr. Richard R. Reilly, Test Program Research and Statistics Division

Project Title: Development of Assessment Measures for Counseling Neighborhood Youth Corps Enrollees

Objectives and Procedures: This three-phrase study seeks to refine the content and define the capability of paper-and-pencil assessment measures, developed in a feasibility study by the researcher, for use as a counseling, guidance, and placement instrument in the Neighborhood Youth Corps. The measures identify such characteristics of NYC enrollees as vocational and occupational plans, aspirations, job knowledge, and interest; attitudes toward self, authority, and social values; and job-related reasoning skills.

In phase I of the project, the researcher is revising present items in the measures, developing additional items, and establishing criteria that reflect the degree of enrollees' success. In phase II, the researcher will measure the characteristics of enrollees' performance after they have completed the NYC program and validate the measures with a followup sample. In phase III, a normative data sample will be collected and a guidance system developed.

Status of Project: Completion of phase I is scheduled for November 1970.

1.2.08 FORDHAM UNIVERSITY
BRONX, N.Y.

CONTRACT NO. 41-7-010-34

Principal Staff: Dr. Mary G. Powers, Gerald M. Shattuck, and Dr. Charles Elliott, Department of Sociology and Anthropology

Project Title: The Job Supervisor's Role in Neighborhood Youth Corps Programs for Out-of-School Youth

Objectives and Procedures: This study examines the role of the Neighborhood Youth Corps job supervisor, who is usually a regular employee of the NYC sponsor (such as a municipal agency, the public library system, or a public hospital) and in close contact with the out-of-school NYC enrollee. The study seeks demographic and social information on job supervisors and compares their conception and performance of their jobs with the expectations of NYC and the sponsoring agencies, with the aim of providing data to assist in the recruitment, training, and direction of job supervisors. The study design was developed through observation of NYC out-of-school job supervision at different types of jobsites in New York City, and data were gathered from interviews with job supervisors, enrollees, and NYC staff.

Status of Project: Completion is scheduled for September 1970.

Highlights of Preliminary Findings: Preliminary results suggest that no single consistent set of expectations existed. As the city program's emphasis shifted from job training to education, there were correspondingly different expectations for job supervisors. Subcontracting agency personnel varied considerably in both their conception of the program's basic goals and their emphasis on an educational versus a job training function.

1.2.09 THE GEORGE WASHINGTON UNIVERSITY
WASHINGTON, D.C.

CONTRACT NO. 41-7-004-09

Principal Staff: Dr. Regis H. Walther, Manpower Research Projects

Project Title: A Study of the Effectiveness of Selected Out-of-School Neighborhood Youth Corps Programs, Phase III

Objectives and Procedures: Building on the work completed in an earlier study sponsored by the Manpower Administration (see **3.1.38**), this project is comparing the effectiveness of selected out-of-school Neighborhood Youth Corps projects (in Cincinnati, Ohio; Durham, N.C.; East St. Louis, Ill.; and St. Louis, Mo.) in facilitating enrollees' adjustment to the world of work and to the community environment.

The project consists of six components: (1) A second round of interviews with the 1965 NYC enrollees described in the earlier study; (2) the Prospective Study—interviews with subjects as they enrolled in the NYC during late 1966 and 1967 and followup on their activities in the NYC program; (3) the Termination Study—interviews with a sample of NYC enrollees who dropped out of the program; (4) the Clerical Co-op Study—an analysis of a specialized skill-training program in Cincinnati for women; (5) the Work-Relevant Attitudes Study—development of scales to measure work attitudes of NYC enrollees so that they can be classified according to their needs and the services required; and (6) the Accelerated Learning Experiment—analysis of an experimental remedial education program being administered in three cities.

Status of Project: Completion is scheduled for October 1970.

Highlights of Preliminary Findings: Both the earlier study and the Prospective Study indicated that the NYC is reaching seriously disadvantaged youth with major employability problems. Enrollees gave generally good reports on the helpfulness of work supervisors and counselors and on the usefulness of the program, particularly those features that increased their employability. Negro women gave the program the highest ratings and stayed in the program the longest period. White men reacted oppositely. Male enrollees were assigned most frequently to cleaning, maintenance, and unskilled labor positions, and female enrollees to clerical and professional aide positions.

The Clerical Co-op Study indicated that a formal skill-training program can achieve far more employment among trainees than typical NYC work-experience programs. Significantly more of the participants in the co-op program than of a control group of youth of similar age, sex, race, and education achieved a good adjustment to the world of work. Within the co-op group, older girls and girls who had gone farther in school were more successful in employment.

In the Work-Relevant Attitudes Study, which involved the testing of a series of measures for determining enrollees' needs, a 22-item inventory was developed that could discriminate between students and school dropouts and determine their respective individual needs on the basis of measurements by a series of scales.

The Accelerated Learning Experiment was shown to be able to achieve significantly better results than conventional programs. In addition, it was found that three levels of remedial education should be offered to trainees, with appropriate opportunities for the enrollees to progress from one level to another.

1.2.10 THE GEORGE WASHINGTON UNIVERSITY

WASHINGTON, D.C.

CONTRACT NO. 41–9–001–09

Principal Staff: Dr. Regis H. Walther, Manpower Research Projects

Project Title: A Study of Negro Male High School Dropouts Who Are Not Reached by Federal Work-Training Programs

Objectives and Procedures: This study explores why Negro male high school dropouts have failed to participate in Federal work-training programs, particularly the Neighborhood Youth Corps, so that improvements may be made in the programs' accessibility and responsiveness to such youth. The study also seeks knowledge of the dropouts' alternative post-school activities, including participation in other training programs, military service, employment, and unemployment. Data were gathered in interviews with the 170 individuals in Baltimore and St. Louis who were available from a random sample of approximately 300 young men who were born before 1952 and who had left school in 1966 and 1967 without graduating from high school.

Status of Project: Completion of the project is scheduled for October 1970.

Highlights of Preliminary Findings: At the time they were interviewed, the youth had been out of school for an average of 2½ years. Various indicators showed they were still in need of extensive employability assistance. Their needs did not decrease with age, among the age range represented in the sample.

A large proportion of the dropout population in the two cities qualified for admission to manpower programs under guidelines established by local poverty agencies. However, subjects who did not meet the poverty guidelines appeared to have as great a need for enhanced employability as those who did.

Being unaware of the NYC and the MDTA programs could account for most of the nonparticipation in these programs by youth with salient employability needs.

Other significant findings were: Unemployment did not result primarily from lack of available jobs; job turnover resulted primarily from a lack of fit between the subject and the job; there was a wide discrepancy between the 10-year occupational goals and the current jobs held by the subjects; and finally, lack of education or training was reported as the principal barrier to occupational goal achievement.

1.2.11 THE GEORGE WASHINGTON UNIVERSITY

WASHINGTON, D.C.

CONTRACT NO. 41–0–003–09

Principal Staff: Dr. Regis H. Walther, Manpower Research Projects

Project Title: A Longitudinal Study of Selected Out-of-School NYC-2 Programs in Four Cities

Objectives and Procedures: This first phase of a four-phase research study builds upon studies of the urban NYC-1 program conducted by the researcher prior to changes made in the program in early 1970 (see **3.1.38, 1.2.09,** and **1.2.10**). When all four phases are completed, the present study will have explored whether enrollment in the new NYC–2 program results in better adjustment of enrollees to the world of work and to what extent specific program changes in NYC–2 projects result in changed program outcomes. Essentially, the work involves the comparison of data to be collected on the NYC–2 projects both with baseline data from the earlier studies and between the new projects. The research is intended to answer such questions as: What are the most effective ways, using multiple assignments and coordinating enrollee needs and program resources, of getting the best results from the limited motivation of many school dropouts? What remedial education techniques provide most assistance to enrollees? How can the work assignments used be most effective as part of the training plan?

The first phase of the research is essentially a feasibility study, for reconnaissance and design development. It is planned that experimental and control groups at each research site consist, respectively, of 125 new enrollees in NYC–2 and 125 school dropouts matched as closely as possible with respect to family income, sex, race, age, school grade completed, and date dropped out of school.

The second phase is designated experimental (measurement of NYC–2 enrollment effects); the third, post-NYC–2 followup and data analysis; and the fourth, longitudinal (comparisons with NYC–1 outcomes and a comprehensive report on the entire project).

Status of Project: Phase I of the study is scheduled for completion in September 1970.

1.2.12 HUMAN RESOURCES RESEARCH ORGANIZATION
ALEXANDRIA, VA.

CONTRACT NO. 51–49–70–03

Principal Staff: Dr. Richard P. Kern

Project Title: Analyses of WIN Team Functioning and Job Requirements

Objectives and Procedures: This research aims to: (1) Analyze the dynamics of team functioning and decisionmaking in the Work Incentive Program (WIN) with respect to their effect upon the individual enrollee; (2) develop specific forms of staffing and inservice training and guidance for team operations, including team member job descriptions, entry-level job knowledge and skill requirements, training objectives, and an outline for inservice team training; and (3) identify criteria for use in evaluating team effectiveness in the achievement of program objectives.

Two samples of WIN teams are being selected as respondents for data collection. The first sample, consisting of approximately 50 WIN teams, constitutes the primary data source. Each team member is being asked, by questionnaire and interview, about job background, job activities performed, role interactions, characteristics of the team's decisionmaking process, and team functioning in working with individual enrollees throughout the enrollment process. To validate and supplement these data, information on all items but work with individual enrollees is being requested by mail questionnaires to members of approximately 100 WIN teams.

Status of Project: Completion is scheduled for November 1971.

1.2.13 HUMAN RESOURCES RESEARCH ORGANIZATION
ALEXANDRIA, VA.

CONTRACT NO. 51–49–70–06

Principal Staff: Dr. Donald F. Haggard

Project Title: Development of Guidelines for the WIN Orientation Program with Emphasis on Training in Vocational Assessment

Objectives and Procedures: This study is designed to develop specific guidelines for national Work Incentive Program (WIN) orientation which will include enrollee training objectives, an outline of course content, tests of enrollee performance, and recommended methods of presenting various subject matters. Information is being obtained from a nationwide sample of 74 WIN projects as a basis for: (1) Identification and description of the attitudes, knowledge, skills, behavior patterns, and levels of performance that WIN clients need to cope with the cultural and performance demands associated with employment upon completion of the program; (2) development of procedures for testing the level of achievement attained; (3) determination of methods and techniques for establishing and reviewing the adequacy of training program objectives; and (4) development of methods and techniques of training that are appropriate to the WIN enrollee population for each subject to be taught.

Status of Project: Completion is scheduled for August 1971.

1.2.14 INTERNATIONAL ASSOCIATION OF FIRE CHIEFS
NEW YORK, N.Y.

CONTRACT NO. 41-0-002-34

Principal Staff: Donald M. O'Brien

Project Title: An Investigation of the Possibilities of Employing the Disadvantaged in the Fire Service

Objectives and Procedures: This research is concerned with ways of increasing the employment of the disadvantaged in fire service occupations. The researcher plans to review present fire service jobs with a view toward possible restructuring to provide better opportunities for employing the disadvantaged and to assess the opportunities that could be opened up to the disadvantaged at both current and prospective levels of employment. He also intends to review current and recently completed programs designed to employ the disadvantaged in the fire service to learn what approaches are most effective and why. These two sets of data are to be used in developing model programs which can be successfully implemented in the "industry."

Status of Project: Completion is scheduled for May 1971.

1.2.15 THE ROBERT F. KENNEDY MEMORIAL
WASHINGTON, D.C.

CONTRACT NO. 41-9-006-09

Principal Staff: Dr. Frederick Siegler

Project Title: Casual Income Acquisition in the Ghetto

Objectives and Procedures: This study is developing information regarding the extent and nature of casual income-producing activities in the ghetto in order to provide useful insights to those concerned with the development of meaningful career employment opportunities. The investigation focuses on understanding the dynamics, mechanisms, and effects of the acquisition of income through casual activities, including such factors as alternative employment opportunities; prevailing community attitudes concerning casual activities; and the influence of physical and environmental factors.

Status of Project: Completion is scheduled for December 1970.

1.2.16 BUREAU OF LABOR STATISTICS U.S. DEPARTMENT OF LABOR
WASHINGTON, D.C.

CONTRACT NO. 41-0-001-09

Principal Staff: Mrs. Sophia C. Travis, Division of Labor Force Studies

Project Title: Study of Youth Summer Employment, Unemployment, and Earnings

Objectives and Procedures: This research reflects the intense concern over the persistence of high youth unemployment, its causes, and possible ways of reducing it. From data collected by the Bureau of the

Census in the October 1969 Current Population Survey, this research is analyzing earnings and summer employment of young people. The earnings study is related to the 16- to 21-year-old labor force and covers the "asking wage" of the unemployed, the amount they earned on their last job, and the current earnings of the employed. The summer employment study concerns only young people who were enrolled in school at the time of the survey. This group was asked to provide information about their jobseeking experience during the preceding summer and, if they found a job, to describe its nature (including occupation, industry, weekly hours of work, weeks worked, and earnings).

Status of Project: A report on the earnings study is expected in January 1971 and one on summer employment in March 1971.

1.2.17 MANPOWER SCIENCE SERVICES, INC.

ANN ARBOR, MICH.

CONTRACT NO. 51-24-70-01

Principal Staff: Dr. Percy Bates

Project Title: Dimensions of Vocational Decision-Making in Manpower Programs for the Disadvantaged

Objectives and Procedures: This project brings together existing experience and knowledge about work-related characteristics of the disadvantaged in order to develop a taxonomy useful to guidance and counseling personnel concerned with vocational and training decisions. From this conceptual integration and from examination of existing measures of these characteristics, priorities are being indicated for the further development of measurement techniques that can be used to establish an employability plan for disadvantaged persons. Particular attention is being given to those individual characteristics which can be described behaviorally and which can be modified by appropriate training or counseling.

Information is being sought on the range of those behavioral and implied characteristics which create major employment problems for the severely disadvantaged. This information is being obtained from existing psychological and sociological research on poverty, unemployment, social class, and cultural and educational disadvantagement; from direct contact with program personnel, instructors, counselors, and job developers; and from researchers active in the manpower field.

Status of Project: Completion is scheduled for April 1971.

1.2.18 METROPOLITAN APPLIED RESEARCH CENTER, INC.

NEW YORK, N.Y.

CONTRACT NO. 41-0-004-34

Principal Staff: Dr. Phyllis A. Wallace and Dr. Patricia Garland Morrissey

Project Title: Unemployment Among Black Teenage Females in Urban Poverty Neighborhoods

Objectives and Procedures: This project is concerned with the nature, extent, and causes of the significant unemployment problems among black teenage girls and the development of effective programs to ameliorate them. Its objectives are: (1) To more accurately describe the characteristics of the black teenage female population which relate to their employment status; (2) to ascertain the influence of sociological and psychological factors on their unemployment, with particular attention to their attitudes toward work and the environmental factors underlying these attitudes; (3) to determine the aspirations and achievements of these black teenage females; and (4) to suggest alternative approaches to reducing unemployment in this group.

A random sample of 100 unemployed black female teenagers, aged 16 to 19, is being selected from three ghetto neighborhoods in the New York metropolitan area: Harlem, Bedford-Stuyvesant, and South Bronx. These girls are being interviewed to obtain demographic data and educational and job history data (both for the girls and their parents). They are also being asked for information on the nature and extent of public assistance received and their perceptions of work itself, the availability of work, the desirability of work, the alternatives to full-time work, job expectations, and perceived opportunities.

Status of Project: Completion is scheduled for March 1971.

1.2.19 MICHIGAN STATE UNIVERSITY
EAST LANSING, MICH.

CONTRACT NO. 51–24–69–09

Principal Staff: Dr. Philip M. Marcus, Department of Sociology

Project Title: Undergraduate Social Work Education and the Needs of the WIN Program

Objectives and Procedures: To enable schools of social work to make a greater contribution to the solution of manpower problems and, especially, the Work Incentive Program (WIN), this study is investigating differences between the professional skills needed in the WIN Program and those supplied in undergraduate social work programs. If analysis of the data indicates that it is feasible to modify courses and curriculums so that graduates will be better trained for work in government programs for the disadvantaged and if schools of social work are receptive to such changes, a subsequent project could develop, initiate, and evaluate such modifications.

Information is being obtained by mail questionnaires from graduates of Michigan State University with a B.A. in social work and by interviews with key members of selected WIN teams in Michigan, supplemented by questionnaires to professional members of the teams.

Status of Project: Completion is scheduled for June 1971.

1.2.20 THE UNIVERSITY OF MICHIGAN
ANN ARBOR, MICH.

CONTRACT NO. 41–8–002–24

Principal Staff: Dr. Robert L. Kahn and Dr. Robert P. Quinn, Survey Research Center

Project Title: Integrating the Chronically Unemployed into the Work Role

Objectives and Procedures: This study analyzes the experience of a large manufacturing company in recruiting chronically unemployed individuals from the inner city and preparing them, through training and counseling, for regular employment and compares their experiences with those of a control group of regular new employees of the same company. The researchers are investigating the influences of institutional and employee characteristics on turnover and the changes in attitudes and work behavior that appear to be linked with employment and/or training. In addition, they are observing the processes and problems of performing an educational-social service function within a profit-oriented organization.

Status of Project: Completion is scheduled for September 1970.

Highlights of Preliminary Findings: Interviews with company workers who quit or were fired indicated that both inner-city and regular workers were more likely to report having experienced poor working conditions such as vague, shifting job assignments, inconvenient shift hours, dangerous work, unfair treatment by the company, and inadequate supervision. While results for the two groups were somewhat different, turnover could be indicated with moderate accuracy by an individual's demographic characteristics but generally not by his attitudes and values.

Data obtained from trainees at various points in their employment indicated that only minimal changes were effected in values and attitudes. Furthermore, turnover was not significantly lower among trainees than among the comparison group of regular new workers who did not go through a training program. The researchers tentatively concluded that short-term orientation, training, and counseling programs are likely to be ineffectual without simultaneous changes in organizational procedures and priorities.

1.2.21 THE UNIVERSITY OF MICHIGAN
ANN ARBOR, MICH.

CONTRACT NO. 51–24–69–10

Principal Staff: Dr. Charles D. Garvin, School of Social Work

Project Title: Decisionmaking in the WIN Program

Objectives and Procedures: This project is one of three longitudinal studies sponsored by the Manpower Administration (see also **1.2.04** and **1.2.05**) to explore the nature and effects of decisions by which men and women receiving Aid to Families with Dependent Children are enrolled in the Work Incentive Program (WIN). Since appropriate decisions are vital, the three investigations are seeking ways of strengthening the decisionmaking process vis-à-vis the development of policy, selection of job opportunities, and counseling of potential WIN participants, especially as these relate to the training of WIN staff.

This study examines WIN decisionmaking in Wayne County, Mich. (See **1.2.05** for a description of the entire project.)

Status of Project: Completion is scheduled for July 1971.

1.2.22 THE UNIVERSITY OF MICHIGAN—WAYNE STATE UNIVERSITY

ANN ARBOR, MICH.

CONTRACT NO. 51–24–69–05

Principal Staff: Dr. Louis A. Ferman and Dr. Joe A. Miller, Institute of Labor and Industrial Relations

Project Title: Welfare Careers and Low-Wage Employment

Objectives and Procedures: This study seeks information on the nature and extent of low-wage employment, especially among welfare recipients, as a guide to measures that could prevent workers in such jobs from alternating between employment and welfare or becoming long-term welfare dependents. On the basis of 125 case studies of welfare recipients and the working poor, an interview schedule covering personal characteristics, labor market experiences, mobility patterns, and participation in manpower programs is being developed and tested. This schedule will be used to interview 500 persons who have received welfare continuously for at least 3 years, 500 persons who have alternated between work and welfare during the same 3-year period, and 250 low-wage workers not receiving welfare.

Status of Project: Completion is scheduled for January 1971.

1.2.23 THE RESEARCH FOUNDATION OF STATE UNIVERSITY OF NEW YORK, BUFFALO

BUFFALO, N.Y.

CONTRACT NO. 41–9–002–34

Principal Staff: Dr. John E. Drotning, Dr. David B. Lipsky, and Myron D. Fottler, Department of Industrial Relations

Project Title: Jobs, Education, and Training: Research of a Project Combining On-the-Job and Literacy Training for the Disadvantaged, Phase II

Objectives and Procedures: This study implements the research plans developed in a feasibility study (see **3.2.10**) on interaction among participants in Project Jobs, Education, and Training (JET), sponsored by the Opportunities Development Corporation in Buffalo, N.Y. In this present study over 860 interviews have been conducted with employers, first-line supervisors, union leaders, and trainees in firms participating in the JET on-the-job (OJT) training program and their counterparts in firms not participating in the JET program.

Information has been collected concerning the attitudes of employers and union leaders toward participation in manpower programs in general and the Job Opportunities in the Business Sector (JOBS) Program in particular; supervisors' attitudes toward hard-core employees, their problems, and proposed solutions; the feelings of JET trainees toward the program, coworkers, supervisors, their jobs, and utilization of their training; and the attitudes of coworkers toward working with the hard-core and their knowledge and feelings about manpower programs and the types of jobs for which the hard-core unemployed should be trained.

Status of Project: Completion is scheduled for January 1971.

Highlights of Preliminary Findings: A higher probability of success for OJT trainees was likely for those who were married, had fewer years of schooling, and were older. These are, in part, characteristics associated with JET's target population. However, whites had a higher probability of success than blacks, and women fared better than men. In this respect, JET was not servicing its target clientele. It was also found that, among previous work experience variables, welfare status was significantly related to two measures of trainee success: (1) Program completion (trainee retention and attrition in the program); and (2) employment (trainee is working or is scheduled to report for work when he leaves the program). Those not receiving public assistance at the point of their entry into the program had a significantly higher probability of success; moreover, the tentative analysis showed the strong relationship between trainee retention in the program and wages. However, there was no tendency for a high-wage JET job to be related to continued employment status for the trainee after termination. Continued working status did not seem related to the trainee's JET experience; rather, it seemed more a function of the trainee's status at the point of his enrollment in the program.

1.2.24 NEW YORK UNIVERSITY
NEW YORK, N.Y.

CONTRACT NO. 41–8–006–34

Principal Staff: Dr. Raymond A. Katzell, Dr. A. K. Korman, and Dr. R. B. Ewen, Department of Psychology

Project Title: The Job Attitudes of Workers from Different Ethnic Backgrounds

Objectives and Procedures: This project seeks to discover whether there are differences in the perceptions and evaluations of jobs and supervisors among workers from different ethnic backgrounds which affect the workers' adjustment to and performance on the job. An attempt is being made to suggest methods of supervision that are likely to prove effective with different groups of workers.

Hypotheses on differing perceptions and evaluations were developed in preliminary interviews with a small number of workers. Based on these hypotheses, a questionnaire has been administered to several hundred white- and blue-collar workers.

Status of Project: Completion is scheduled for August 1970.

Highlights of Preliminary Findings: Employees on the whole expressed fairly favorable attitudes toward their jobs. They were relatively more satisfied with the nature of the work and with their supervisors than they were with pay and promotional opportunities.

Black employees were slightly more satisfied than white employees, with the greatest differences occurring in attitudes toward advancement, coworkers, and job content. However, the magnitude of the differences suggests that race is not a particularly important correlate of job satisfaction.

Where supervisory ratings were obtained, more satisfied employees were evaluated significantly more favorably. This relationship held true for both black and white employees.

1.2.25 NORTH STAR RESEARCH AND DEVELOPMENT INSTITUTE
MINNEAPOLIS, MINN.

CONTRACT NO. 51–25–69–06

Principal Staff: Dr. Guy H. Miles and David Thompson

Project Title: Characteristics of the AFDC Population that Affect the Outcomes of WIN

Objectives and Procedures: This study of two groups of 3,000 individuals each investigates: (1) Differences in attitudes, behavior, perceptions, value systems, and related characteristics between the woman dependent on Aid to Families with Dependent Children (AFDC) for more than 5 years and the one who finds a job and leaves AFDC; (2) effects of long-term dependency on the welfare recipient's family; (3) changes over time in the long-term welfare recipient's perception of the benefit system; (4) relationships between family stability and economic self-sufficiency of the household's head; (5) effects of the Work Incentive Program (WIN) on the participant's personality, family relationships, value system, attitudes, motivation, and economic status; and (6) relationships between the attainment of WIN goals and such factors as availability and quality of jobs, participant's health, and relevance of training.

Three interviews (at 6-month intervals) are being conducted with 3,000 women participating in the WIN Program to determine whether the experience produces significant changes in employment status and the critical characteristics that differentiate long- and short-term AFDC recipients. A similar investigation is being made of 3,000 working poor and general welfare recipients who would be eligible for coverage under the proposed Family Assistance Plan.

Status of Project: Completion is scheduled for December 1970.

1.2.26 NORTH STAR RESEARCH AND DEVELOPMENT INSTITUTE
MINNEAPOLIS, MINN.

CONTRACT NO. 51–25–70–08

Principal Staff: Dr. Guy H. Miles

Project Title: Developing a Model WIN Project for Rural Areas

Objectives and Procedures: This study is designed to develop a model Work Incentive Program (WIN) project for rural areas. (For a parallel study for urban areas, see **1.2.29.**) More specifically, its objectives are: (1) To analyze existing rural WIN projects to determine which aspects are most and least effective; (2) to identify the characteristics of those rural areas where the WIN Program is most successful, emphasizing the effects of interaction between community characteristics and WIN project characteristics; and (3) to identify the characteristics of those rural areas where WIN is not yet in operation.

The methodology includes: (1) Drawing a sample of six counties from each of four geographic regions (the Northeast, the South, the North Central States, and the West); (2) development, testing, and administration of data collection instruments to a random sample of 1,000 persons enrolled in WIN projects in the selected rural counties; (3) investigation of the community and project characteristics through interviews with WIN administrators, enrollees, and community leaders and from census data and a variety of other sources; and (4) analysis of the data to determine what kinds of communities and persons are most effectively served by WIN projects and whether there is an interaction between type of community, type of person served, and various kinds of WIN projects.

The proposed WIN models resulting from this work will be validated in a subsequent phase of the study.

Status of Project: The first phase of the study is scheduled for completion in March 1971.

1.2.27 NORTHEASTERN UNIVERSITY
BOSTON, MASS.

CONTRACT NO. 41–9–004–23

Principal Staff: Dr. Morris A. Horowitz and Dr. Harold M. Goldstein, Department of Economics

Project Title: Restructuring Paramedical Occupations

Objectives and Procedures: This study, following up a pilot study by the same researchers (see **3.5.38**), seeks to develop and test techniques for easing the shortage of skilled paramedical personnel in the health services and, in the process, providing to disadvantaged persons more job opportunities with the potential for upward mobility. With the cooperation of a hospital in the Boston area, the researchers are analyzing the duties and responsibilities of the various paramedical occupations to develop appropriate hiring standards and recommend changes in work assignments and hiring standards to improve use of personnel and the quantity and quality of patient care. They will, in the final phase, study the effects of implementing the recommended changes and analyze any barriers that may be encountered in doing so.

Status of Project: Completion is scheduled for September 1971.

1.2.28 THE OHIO STATE UNIVERSITY RESEARCH FOUNDATION
COLUMBUS, OHIO

CONTRACT NO. 51–37–70–09

Principal Staff: Dr. Herbert S. Parnes, Center for Human Resource Research

Project Title: Analysis of Characteristics of Potential Recipients of Family Assistance Through Use of Longitudinal Surveys Data

Objectives and Procedures: This study is a special analysis of data from the researcher's 5-year survey of labor force behavior for four age-sex groups (see **1.1.29** and **2.1.24**) to learn more about persons who would be affected by enactment of the Family Assistance Plan (FAP). As proposed, FAP would establish national minimum standards of income and other support for families with children and would provide for education, job training, and placement to help the working poor as well as persons on welfare to achieve some measure of financial independence.

Intensive analyses of the assembled information are expected to provide background for the preparation of operating plans and guidelines and some assessment of the probable problem areas inherent in the program.

Status of Project: Completion is scheduled for June 1971.

1.2.29 PACIFIC TRAINING AND TECHNICAL ASSISTANCE CORPORATION
BERKELEY, CALIF.

CONTRACT NO. 51–09–70–10

Principal Staff: Dr. Milton Andrus

Project Title: A Model Work Incentive (WIN) Program for Urban Areas

Objectives and Procedures: The objective of this study is to examine alternative strategies, techniques, and approaches used in WIN projects in order to develop a more effective WIN urban program model. (For a parallel study for rural areas, see **1.2.26.**) The study consists of the following elements: (1) Development of a definition of an "effective" WIN project; (2) review of a large number of urban WIN projects and examination of their program planning, management and administration, and program services; (3) identification of basic community characteristics which significantly affect the construction of the WIN project model: (4) determination of those factors considered by WIN participants as most critical to the effectiveness of the project: and (5) an indepth analysis of a limited number of WIN projects to determine more specifically the aspects of WIN operations which are crucial to the development of an effective program.

Status of Project: Completion is scheduled for March 1971.

1.2.30 THE PENNSYLVANIA STATE UNIVERSITY
UNIVERSITY PARK, PA.

CONTRACT NO. 41–8–001–40

Principal Staff: Dr. Morgan V. Lewis, Institute for Research on Human Resources

Project Title: Factors Influencing the Retention of Participants in a Concentrated Employment Program and Their Subsequent Employment Experiences

Objectives and Procedures: This project, originally designed to investigate factors which hinder the individual's use of Concentrated Employment Program (CEP) services, has been expanded to include a second phase. The added component is exploring aspects of the job, the worker, and the firm that distinguish long-term job retention from short-term and erratic tenure of CEP participants and of work accommodation that are necessary to both former CEP participants and their employers.

In phase I, data were obtained from about 300 persons who expressed interest in the CEP but either never enrolled or withdrew before completing any phase of the program and from approximately the same number of participants who stayed with the program. In phase II, a sample of 500 former participants in the Columbus, Ohio, CEP are being followed up and interviewed to ascertain their employment experiences during the 6 months after they left CEP, as well as a comprehensive description of their most recent jobs. Information about their most recent jobs is also being obtained from a sample of 250 coworkers and 250 direct supervisors. Interviews are being conducted with 75 personnel officials of companies which have hired CEP referrals to find out the type and quality of jobs offered CEP participants and the companies' experiences with these employees.

Status of Project: Phase I has been completed and phase II is scheduled for completion in October 1970.

Highlights of Preliminary Findings: Data from phase I revealed striking similarities between those individuals who were contacted but never enrolled in CEP and the CEP participants in their personal characteristics, attitudes toward life in general, attitudes toward CEP, and reactions to their treatment by the CEP staff. The major difference between the two groups was in their opinions of what CEP could do for them, with those never enrolled decidedly more skeptical than the others about the probable outcome. Paralleling this finding, it appeared that failure of the CEP to meet enrollees' expectations or satisfy their job desires was the reason that most enrollees dropped out of the program.

1.2.31 UNIVERSITY OF PENNSYLVANIA
PHILADELPHIA, PA.

CONTRACT NO. 51-40-69-01

Principal Staff: Dr. Samuel Z. Klausner, Department of Sociology

Project Title: The Work Incentive (WIN) Program: Making Adults Economically Independent

Objectives and Procedures: This project seeks basic information on the effects of participation in the Work Incentive Program on the process of adult socialization so that the program may be fully responsive to welfare recipients' needs. It also assesses the program's impact on the participants' labor market activity.

The study involves 300 persons receiving Aid to Families with Dependent Children, selected from welfare rolls in Camden, N.J., for referral to the local manpower agency and enrolled in a suitable WIN project, and another 300 AFDC recipients, eligible for but not referred to training because no suitable vacancies were available, who served as the control group. Information is being obtained on their personal, social, and demographic characteristics, employability, motivation for employment, aspirations for promotion, attitudes toward working in particular situations, reactions to monetary remuneration, and cultural style that may affect employability.

Status of Project: Completion of the project is scheduled for November 1970.

1.2.32 UNIVERSITY OF SOUTHERN CALIFORNIA
LOS ANGELES, CALIF.

CONTRACT NO. 51-05-70-05

Principal Staff: Dr. Genevieve W. Carter, Research Institute in Social Welfare

Project Title: A Longitudinal Study of WIN Drop Outs: Program and Policy Implications

Objectives and Procedures: This study is concerned with high dropout rates (an estimated 40-80 percent of referrals in some areas) in the Work Incentive Program (WIN) and the interrupted progress through the system of enrollees placed in deferred, hold, or recycle status. First, it is investigating enrollees' reasons for dropping out and analyzing variations among trainees with differing characteristics. Second, it is examining the organizational bases for placing enrollees in deferred status, in holding, or recycling patterns and the effect of these practices on enrollees. Third, it is attempting to provide a tool for increasing the effectiveness of the training program by developing a typology of enrollees who differ in background, education, life style, and work experience. Finally, it is endeavoring to guide development of remedial resources and supportive services through a critical analysis of problems in the WIN training components and in the coordination of the welfare and WIN systems.

Three spaced interviews with enrollees who drop out and those placed in deferred, hold, or recycle status are intended to identify the high-risk points, in relation to enrollees' expectations and fulfillment. Information obtained from both welfare and WIN counselors is being used to develop and test an index of "mobility potential" which can be used to indicate those enrollees with a dropout potential.

Status of Project: Completion is scheduled for December 1971.

1.2.33 WAYNE STATE UNIVERSITY
DETROIT, MICH.

CONTRACT NO. 51–24–70–07

Principal Staff: Dr. Gloria Cowan, Department of Psychology

Project Title: Staff Attitudes and Success of WIN Programs

Objectives and Procedures: The purpose of this study is to determine the relationship between staff attitudes and the effectiveness of the Work Incentive Program (WIN). Staff attitudes being investigated include philosophy of human nature, sense of own fate control, sense of fate control predicted for enrollees, attitudes toward the program itself, attitudes toward one's job, and prediction of work orientation of WIN enrollees.

Attitudes are being measured through a set of questionnaires and interviews, and WIN programs are being assessed through a set of criteria being developed in consultation with WIN staff members, officials, and enrollees. The influence of factors other than staff attitudes are also being taken into account.

Status of Project: Completion is scheduled for August 1971.

1.2.34 THE UNIVERSITY OF WISCONSIN
MILWAUKEE, WIS.

CONTRACT NO. 51–53–69–12

Principal Staff: Dr. Milton J. Huber, Center for Consumer Affairs

Project Title: The Relationship of Over-Indebtedness and Garnishments to Employability Among Milwaukee WIN Families

Objectives and Procedures: This project, which consists of three phases, investigates the operational problems and the effects of making loans to participants in the Work Incentive Program (WIN) to remove the threat of garnishment. Major questions are whether financial assistance to remove the threat of garnishment will: (1) Decrease the dropout rate among WIN participants; (2) encourage employers to hire WIN trainees with previous garnishment problems; (3) increase job stability among WIN-trained employees; and (4) reduce their absenteeism.

In phase I, the feasibility phase, three groups of WIN participants in Milwaukee, each consisting of 25 enrollees, were interviewed before job placement and 6 months later. The three groups were: (1) Those in debt and in fear of garnishment, who received long-term, low-interest loans, financial counseling, and help in working out a debt amortization plan; (2) similarly situated enrollees who received no assistance with their debts; and (3) a control group who had no fear of garnishment. Loans for the first group were provided through the Manpower Administration's experimental and demonstration program.

Phase II builds upon the findings of the first phase and expands the study group to 300 enrollees, evenly divided among the three groups. Phase III is set aside for collections from those who received long-term, low-interest loans in phase II.

Status of Project: Phase I has been completed. Phase II completion is scheduled for June 1971; phase III for June 1974.

Highlights of Preliminary Findings: None of the 25 persons who received loans during the first phase of the study has missed a repayment date. The pilot study did, however, demonstrate that enrollees need individual financial counseling if they are to avoid additional debts.

1.2.35 THE WRIGHT INSTITUTE
BERKELEY, CALIF.

CONTRACT NO. 51–05–69-04

Principal Staff: Dr. Edward M. Opton, Jr.

Project Title: Exploratory Investigation of Aids to Financial Independence Among AFDC Mothers

Objectives and Procedures: This study explored the feasibility of obtaining valid data to permit the development of testable hypotheses about why some mothers receiving Aid to Families with Dependent Children (AFDC) are able to become self-supporting and leave welfare while others cannot do so. From 25 AFDC mothers in each of three groups—those who have achieved financial stability and independence, those who have little work experience and have been on welfare continuously, and those who have the "typical" AFDC employment pattern of unstable, often part-time, low-wage work, information was obtained from interviews and group discussions on such matters as social and family situation, jobseeking methods, assistance from government agencies and staff, self-concept and values, and personality.

Status of Project: Completion is scheduled for September 1970.

1.3 PROJECTS ACTIVE ON JUNE 30, 1970—Manpower Research Institutional Grants Under the MDTA [13]

This section describes the activities during fiscal year 1970 at seven colleges and universities under manpower research institutional grants. (For information on earlier activities under these grants, see *The Manpower Research Institutional Grant Program: The First Three Years*, available from the Manpower Administration.) Instructions for obtaining copies of reports completed under these grants during fiscal years 1966–70 appear in section 3.3. These seven schools will continue to receive support through fiscal year 1971.

In February 1970, 12 universities were selected to receive similar awards for a 4-year period beginning in August 1970. These schools and the divisions that are to administer the grant programs are: (1) Brandeis University—Florence Heller Graduate School for Advanced Studies in Social Welfare; (2) Cornell University—School of Industrial and Labor Relations; (3) Memphis State University (with The University of Mississippi)—Mid-South Regional Manpower Development Center; (4) North Carolina Agricultural and Technical State University—Institute for Research in Human Resources; (5) The Ohio State University—Center for Human Resource Research; (6) Southern Methodist University—Department of Economics; (7) University of California, Los Angeles—Institute of Industrial Relations; (8) University of Missouri-Columbia—Department of Economics; (9) University of Oregon—Institute of Industrial and Labor Relations; (10) University of Utah—Human Resources Institute; (11) Virginia State College—Bureau of Economic Research and Development; and (12) West Virginia University—Division of Social Work. Information on the plans of the 12 new grant recipients is presented in *Manpower Research Institutional Grants: Plans of the Twelve Grant-Recipient Schools Selected in 1970*, also available from the Manpower Administration.

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[13] Requests for information concerning these institutional grants should be directed to the principal staff.

1.3.01 ATLANTA UNIVERSITY

ATLANTA, GA.

GRANT NOS. 91–11–66–60
91–11–67–31
91–11–68–63
91–11–69–57
91–11–70–04

Principal Staff: Dr. Robert C. Vowels, Dean, School of Business Administration, and Institutional Representative, Center for Manpower Studies

Major School or Department: Graduate School of Business Administration

Research: Center researchers have continued to focus on regional manpower problems, particularly those of minority groups. Center personnel are cooperating with the Southern Center for Studies in Public Policy in an examination of the employment adjustment of migrants, particularly rural persons, to the Atlanta metropolitan area. Work has also continued on a study of Negro workers' perceptions of employment opportunities in the South (funded by a Manpower Administration project grant, see **1.5.02**).

Two studies completed during fiscal year 1970 were: (1) "The Black MBA—Not Qualified?—Or Misunderstood?," an article examining communication barriers in interviews between black students about to receive a master's degree in business administration and white recruiters; and (2) "Employment Creation Effects of Negro Business, with Particular Emphasis on Negro Employment Potential," a report exploring the attitudes of Negro youth and businessmen and the employment capacity of the latter's enterprises.

Program: A field course was introduced in fall 1969 to bring together graduate students in business administration with small-business owners who had critical managerial problems, including manpower problems. This course is an extension of one of Atlanta's eight manpower-related courses. Also developed this year was a lecture series on the income gap between blacks and whites. Two of the 11 graduate students receiving substantial support from grant funds were awarded master of business administration degrees this year.

1.3.02 IOWA STATE UNIVERSITY OF SCIENCE AND TECHNOLOGY

AMES, IOWA

GRANT NOS. 91–17–66–61
91–17–67–32
91–17–68–64
91–17–69–58

Principal Staff: Dr. Edward B. Jakubauskas, Director, Industrial Relations Center

Major School or Department: Department of Economics

Research: Center researchers continued to work in the areas of health manpower, occupational employment forecasting, managerial and leadership questions, collective bargaining and arbitration, manpower program evaluation, and aging and retirement. Ongoing projects include an examination of career choice in the medical field, a projection of occupational employment trends at the regional level, a longitudinal study of manager performance, research on public sector bargaining, and an examination of the uses of cost-benefit analysis as an evaluation tool.

Publications completed during fiscal year 1970 and supported by grant funds include:

1. "Job Vacancies in Iowa Manufacturing Establishments," reports the sixth and seventh in a series of semiannual surveys designed to measure the nature and extent of vacancies, partly as an aid to Iowa's area vocational schools and community colleges in developing curriculum and training programs.

2. "The Social Sciences and Manpower Research," reports the proceedings of Iowa State University's Second Annual Summer Manpower Research Institute in June 1968. Topics discussed were: (a) The role and relevance of manpower research in meeting the Nation's manpower problems, (b) Congress' role in human resource development, (c) sociology's contribution to manpower research, (d) motivational issues in manpower training programs, (e) cultural differences and attitudes toward employment, and (f) urban problems and the role of social science research.

3. "Stability and Real Economic Growth: An International Comparison," constructs a measure of stability in economic growth from data on the gross na-

tional product of 43 countries for 1950–66 and compares the results with real economic growth rates.

4. "Resolving of Unrest in the Public Sector—The Use of Neutrals in the Public Sector," urges the use of qualified "neutrals" as mediators, factfinders, and advisory arbitrators to resolve labor-management disputes in the public sector instead of stressing compulsory arbitration which is often the private sector's alternative to the right to strike.

5. "Patterns of Retirement of College Professors and Related Institutional Policies" (master's thesis), examines existing retirement policies at selected colleges, means of changing them along the lines desired by professors, and retired professors' financial situation and problems, activities, and willingness to accept work in community service.

Program: A bachelor's degree program in industrial relations was established in the 1969–70 academic year on a trial basis, as an adjunct to the existing master's degree program in industrial relations and Ph.D. programs in manpower-related disciplines with concentrations on manpower problems. Nine undergraduate students and 39 graduate students were enrolled in these programs during the year. Of the 15 graduate students receiving financial support from grant funds, one completed a Ph.D. in economics and seven earned master's degrees in economics or industrial relations.

In June 1970, the Industrial Relations Center sponsored the fourth in a series of nondegree summer institutes to promote manpower research among faculty members at colleges and universities in neighboring cities and States. During the academic year a new seminar in manpower and industrial relations attracted guest lecturers from Iowa unions, businesses, and associations.

1.3.03 UNIVERSITY OF MAINE
ORONO, MAINE

GRANT NOS. 91–21–66–63
91–21–67–34
91–21–68–66
91–21–69–60

Principal Staff: Dr. A. M. Huq, Director, Manpower Research Project

Major School or Department: Departments of Psychology and of Sociology and Anthropology; College of Business Administration, including Economics and Business Management

Research: Research by an interdisciplinary team of faculty and students has continued to focus on manpower development and planning in the mature semirural economy of Maine.

A research report entitled *Manpower Utilization in Maine* was completed during fiscal year 1970. This study examined the underutilization of men of prime working age through interviews with a sample of 826 men (ages 18 to 44) from different areas of Maine. In an ongoing study of factors determining students' educational and occupational planning, data have been collected from a sample of 4,000 Maine students graduating from high schools and nursing and vocational schools. In cooperation with the State Board of Education, the research team has undertaken a pilot study of rates of return on the nursing and graphic arts programs offered by Maine's vocational schools.

Researchers are updating and expanding a 1968 study of migration patterns of University of Maine graduates. They have nearly completed an examination of psychological and social factors influencing the migration decisions of unemployed quarry workers.

Two new studies are investigating: (1) The feasibility of improving manpower utilization of the chronically unemployed and underutilized workers through attitude training to eliminate feelings of powerlessness: and (2) the effects on employment and other economic factors of limited entry into the Maine lobster industry (in cooperation with the Maine Department of Sea and Shore Fisheries).

Program: During the 1969–70 academic year 10 graduate students participated in the interdisciplinary manpower research seminar, with the second semester devoted to research on State problems. As an adjunct to this seminar, an experimental, student-conducted seminar was introduced to encourage undergraduates' study of manpower and economic development in Maine. In addition a new manpower-related course, Economics of Human Capital, has been approved, open to graduate students in economics.

During the year two graduate students received research assistantships based on institutional grant funds. One former recipient of an assistantship received an M.A. in economics.

1.3.04 NORFOLK STATE COLLEGE
NORFOLK, VA.

GRANT NOS. 91–49–66–66
91–49–67–37
91–49–68–69
91–49–69–63

Principal Staff: William L. Craig, Jr., Director, Manpower Research Institute

Major School or Department: Departments of Business Administration, Industrial Education, Economics, Psychology, Sociology, and Geography-History

Research: Institute researchers have focused on area manpower problems. They are exploring: (1) Racial differences in job search methods of low-income individuals in the Norfolk-Portsmouth, Va., area; and (2) effects of modernization on the longshoring industry of Hampton Roads, Va.

Two research reports were completed during fiscal year 1970: (1) *Manpower Utilization in Tidewater-Hampton Roads, Virginia,* which examined the extent and some causes of manpower underutilization in the area; and (2) *An Evaluation of the Norfolk Summer Job Program,* which surveyed disadvantaged youth participating in a summer employment program combining half-time work with supervised recreation to ascertain changes in their attitudes and their evaluation of the program. Institute researchers have begun a similar evaluation of Norfolk's 1970 summer jobs program.

Program: Students taking the manpower research seminar also began participating in a sociology seminar introduced in the 1969–70 academic year to provide a thorough understanding of research methodology and statistics. Of the 14 students receiving grant-based assistantships this year, four earned bachelor's degrees in May and four more are expected to graduate in August 1970.

On April 24, 1970, Norfolk State College held its fourth annual symposium, which focused on the implications for manpower programs of current social and economic developments. Over a hundred representatives of business, labor, and government participated in the symposium.

1.3.05 NORTH CAROLINA STATE UNIVERSITY
RALEIGH, N.C.

GRANT NOS. 91–35–66–65
91–35–67–36
91–35–68–68
91–35–69–62

Principal Staff: Dr. William D. Toussaint, Head, Department of Economics, and Dr. Robert M. Fearn, Institutional Representative

Major School or Department: Department of Economics

Research: Faculty and student research continued to focus on the areas of lifetime allocation of leisure, income, and work; labor force participation of teenagers; relationship of wage levels, skill requirements, and U.S. tariff policies; health manpower; and racial income and employment patterns. Active studies include analyses of the spatial distribution and income of physicians and dentists and a study of racial employment patterns among nonprofit institutions and business firms in Wake County, N.C.

The following are among the reports and papers supported largely by institutional grant funds and completed during fiscal year 1970:

1. "Minimum Wages and Unemployment of Teenagers," discusses the impact of the following factors on unemployment of teenagers by color and sex between 1948 and 1968: (a) Increasing Federal minimum wage levels and coverage, (b) increasing relative supply of teenagers in the labor market, and (c) cyclical changes in the relative size of the teenage labor force.

2. "Alternatives for Financing Adequate Health Care," advocates economic analysis of the health care industry and a universal health plan designed to reduce the number of the potentially medically indigent and the high cost of individual health care arrangements.

3. "Aging and Financial Management," formulates the issues involved in building an income-maintenance program for the ever-lengthening period of retirement and analyzes patterns of income and saving.

4. "Higher Incomes for Older Americans," discusses the lagging relative income of retirees in the face of increasing length of life-in-retirement and growth in real income of other segments of the population.

5. "Economics of Retirement," analyzes retirement income in the United States in terms of: (a) Practices in other countries, (b) the inverse relationship between income and work, and (c) income maintenance and other concepts and patterns.

6. "Separation of Work and Income," discusses issues, problems, practices, and proposals connected with income maintenance programs.

7. "From Welfare Rolls to Payrolls? The Welfare System as a Manpower and Rehabilitation System," traces the evolution of policy concerning Aid to Families with Dependent Children (AFDC) from the initial aim of providing income support while giving mothers freedom to make the work-welfare choice, through the 1962 Public Welfare Amendments' emphases on service, rehabilitation, and work training, to the 1967 Public Assistance Amendments' provisions for a combined income maintenance and rehabilitation program.

8. "Monopoly Power and Negro Male Employment," examines the impact of monopoly power in the product and factor markets on Negro male employment patterns.

Program: Enrollment increased during the 1969–70 academic year in the two manpower-related seminars introduced into the graduate economics curriculum in 1967–68 in connection with the institutional grant. Three of the 10 graduate students engaged in master's or Ph.D. work in the manpower area received substantial financial support from the grant during the 1969–70 academic year, and one candidate received his M.A. degree.

1.3.06 OKLAHOMA STATE UNIVERSITY OF AGRICULTURE AND APPLIED SCIENCE, RESEARCH FOUNDATION

STILLWATER, OKLA.

GRANT NOS. 91–38–66–64
91–38–67–35
91–38–68–67
91–38–69–61

Principal Staff: Dr. John C. Shearer, Director, Manpower Research and Training Center

Major School or Department: College of Business, Department of Economics

Research: Faculty and student research continued to focus on regional manpower problems. Several ongoing projects examine the pattern of Oklahoma's economic development; noneconomic influences on American Indians' decisions on whether to migrate to urban areas; and development and use of the statewide occupational training information system (OTIS).

The OTIS project, as well as several studies of labor force behavior, underscore the Center's success in building research competence that broadens its base of support. The OTIS project was conducted under a contract with the Manpower Administration (see **2.1.25**). The labor force studies, and the principal sources of funding, were: An examination of employability services for recipients of unemployment insurance (financed by the W. E. Upjohn Institute for Employment Research); a study of the effects of supplemental labor market information in encouraging self-initiated job search by registrants at public employment service offices (under a Manpower Administration contract—see **1.1.30**); and a statistical analysis of the determinants of hours of work of low-income family units (under a Manpower Administration dissertation grant—see **1.4.72**).

Analysis of the potential use of discharged military corpsmen in civilian health occupations has been carried on with field studies of the military training and utilization of these corpsmen and with systematic appraisals of the potential acceptability of such corpsmen to inhabitants of doctorless rural communities and inner-city neighborhoods.

The following were among the reports and papers developed largely under institutional grant funding and completed during fiscal year 1970:

1. "The Economic Effectiveness of On-the-Job Training: The Experience of the Bureau of Indian Affairs in Oklahoma," analyzes the social and private benefits and costs of on-the-job training for 226 American Indians.

2. "A Note on the Discouragement Effect," suggests that the concept of the discouragement effect—that an economic slowdown causes some unemployed persons to drop out of the labor force—is not particularly useful in a geographic area affected by migration.

3. "A Descriptive Study of the Servicemen and Veterans Enrolled in Oklahoma's Vocational and Technical Training Programs in the Fall of 1968" (derived from a master's thesis), describes the personal characteristics of servicemen and veterans in Oklahoma's voca-

tional and technical training institutions and programs.

Program: Heavy emphasis continued on training of master's degree candidates in manpower-related fields. Manpower Fellows must complete a series of manpower courses, as well as courses in their own departments, and serve internships in manpower research programs. Five Manpower Fellows received degrees during the 1969–70 academic year, and 11 continued to receive financial support under the program at the end of the year.

1.3.07 TEMPLE UNIVERSITY
PHILADELPHIA, PA.

GRANT NOS. 91–40–66–62
91–40–67–33
91–40–68–65
91–40–69–59

Principal Staff: Dr. Louis T. Harms, Director, Manpower Research Institutional Grant Program

Major School or Department: Department of Economics, School of Business Administration

Research: Research at Temple has focused increasingly on urban problems and regional economics. Ongoing studies examine the Philadelphia Plan (to increase the proportion of minority group members employed in federally assisted construction work), consumer problems of ghetto residents, aspects of future labor force participation by State (for two private firms), and the employment effects of firms' entering and leaving the Philadelphia labor market (under a Manpower Administration contract; see **1.1.36**). Other active studies concern collective bargaining and arbitration in public employment and factors affecting the demand for health manpower (for the U.S. Public Health Service).

Publications resulting from grant support during fiscal year 1970 include the following:

1. *Emerging Sectors of Collective Bargaining*, includes papers by five faculty members involved in the institutional grant program reviewing the nature, conditions, and consequences of collective bargaining in agriculture, the performing arts, hospitals, police and firefighting, and public education.

2. *The Impact of Decentralization on Collective Bargaining in Urban Education*, discusses community motives for school decentralization and examines the effect of decentralization on teacher organizations, the structure of negotiations, relative bargaining power, and teacher supply.

3. *An Economic Cost-Benefit Model of Migration*, reviews various studies on migration and related cost-benefit analyses and outlines an approach that considers the social ramifications of economic decisionmaking.

4. *The Place of Social Insurance in the Pursuit of the General Welfare*, discusses the rise of social insurance as a tool of public policy for meeting the requirements of the general welfare in economic risk areas and under conditions that can make it effective as a socioeconomic stabilizer and antipoverty instrument.

5. *Teacher Negotiations and School Decentralization*, analyzes data on topics now included in teachers' collective bargaining agreements; teachers' attitudes on how and at what level employment and educational policy issues should be resolved; and the effects on negotiations of alternative decentralization plans.

6. *A Model for the Distribution of Hospital Services in Pennsylvania*, describes a model that attempts to relate the use of hospital services to demographic and economic variables, public expenditures, and health insurance. It tests the model with 1966 data for Pennsylvania's 67 counties.

Program: In the last year curriculum requirements for Ph.D. candidates in economics with a concentration in manpower studies have been restructured to provide greater freedom of choice in the field of concentration. Two new graduate courses have been added (on labor market theory and organization and on manpower programs and policies) to the 11 manpower courses introduced since the institutional grant program began.

During the 1969–70 academic year, 29 students have been actively pursuing manpower-oriented graduate degrees in economics or business administration. Thirteen of these have received financial support from institutional grant funds, and 10 from university funds. This year four students passed their preliminary examinations for Ph.D.'s and one received an M.B.A. with a concentration in health administration.

The School of Business Administration, in conjunction with the Opportunities Industrialization Center, sponsored a regional American Assembly on Black Economic Development in Philadelphia in April 1970. In addition, six symposiums on social security were conducted for faculty members from Temple and other universities and for interested persons in government and other agencies. Four outstanding economists addressed faculty and students during the year at manpower luncheon discussions.

1.4 PROJECTS ACTIVE ON JUNE 30, 1970—Doctoral Dissertation Grants Under the MDTA[14]

1.4.01 BOWLING GREEN STATE UNIVERSITY
BOWLING GREEN, OHIO

GRANT NO. 91–37–70–53

Doctoral Candidate: James G. Goodale, Department of Psychology

Sponsor: Dr. Patricia C. Smith

Dissertation: Background Characteristics, Orientation, Work Experience, and Work Values of Employees Hired from Human Resources Development Applicants by Companies Affiliated with the National Alliance of Businessmen

Objectives and Procedures: This project is examining the relationship of high turnover among disadvantaged workers hired by National Alliance of Businessmen (NAB) firms and the work values and attitudes of the workers. Their values and attitudes are being compared with those of other newly hired workers and related to characteristics (race, work experience, place of birth, socioeconomic class, and parents' educational-occupational level), absenteeism, tardiness, job performance, content of the orientation program, and current job.

A sample of 750 newly-hired, blue-collar employees (half classified as disadvantaged and half not) is being selected from several NAB firms. Work values and attitudes are being gaged through a battery of questionnaires administered to the employees immediately after they are hired, following orientation, and after 3 months on the job. Supplementary information is being drawn from job applications, foremen's performance ratings, and other company records.

Estimated Completion Date: June 1971

1.4.02 BRANDEIS UNIVERSITY
WALTHAM, MASS.

GRANT NOS. 91–23–66–59
91–23–67–45

Doctoral Candidate: Jane Gaudette Jones, The Florence Heller Graduate School for Advanced Studies in Social Welfare and Heller Research Center

Sponsor: Dr. Stephen J. Miller

Dissertation: The Career Patterns of Women Physicians

Objectives and Procedures: This study is identifying factors which motivate women to enter the medical profession and obstacles which they must overcome.

A sample of women students, dropouts, and graduates of the medical schools of Boston University, Tufts University, Radcliffe College, and Harvard University is being interviewed about career decisions and about personal and professional career patterns. Key persons in medical education are also being interviewed.

Estimated Completion Date: By June 1971

1.4.03 UNIVERSITY OF CALIFORNIA, BERKELEY
BERKELEY, CALIF.

GRANT NO. 91–05–68–04

Doctoral Candidate: John S. Spier, Department of Sociology

Sponsor: Dr. Robert Blauner

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[14] Requests for information concerning these dissertations should be directed to the doctoral candidates.

Dissertation: Racial Integration in the Railroad Operating Crafts

Objectives and Procedures: This study is examining conditions which cause Negroes to succeed or fail in a previously all-white industry when employment is opened to them. Railroad operating crafts in the San Francisco Bay area, virtually closed to all but whites until the early 1960's, provide the work setting for the study.

The researcher is attempting to interview the approximately 75 Negroes hired for such jobs since the early 1960's (whether still employed or not). These interviews cover job history and aspirations, education, family background, and reasons for leaving the railroad (where applicable). Comparative data are being collected from 25 white employees in the craft, who are being queried in addition concerning their views of Negroes as coworkers and whether their attitudes have changed since the preintegration period. Additional material is being obtained through interviews with local union and company officials.

Estimated Completion Date: By June 1971

1.4.04 UNIVERSITY OF CALIFORNIA, BERKELEY

BERKELEY, CALIF.

GRANT NO. 91-05-68-70

Doctoral Candidate: Robert J. Flanagan, Department of Economics

Sponsor: Dr. Lloyd Ulman

Dissertation: International Differences in Non-Cyclical Unemployment

Objectives and Procedures: This study seeks to determine why the rate of unemployment associated with price stability is considerably higher in the United States than in some European countries. Several hypotheses on labor policies and seasonal, frictional, and structural unemployment are being tested to determine their influence on international differences in unemployment, using unpublished as well as published data on wages, profits, cost of living, and aggregate unemployment rates for Great Britain, Sweden, and the United States.

Estimated Completion Date: By June 1971

1.4.05 UNIVERSITY OF CALIFORNIA, BERKELEY

BERKELEY, CALIF.

GRANT NO. 91-05-69-01

Doctoral Candidate: Jeffrey M. Schevitz, Department of Sociology

Sponsor: Dr. Harold L. Wilensky

Dissertation: Social and Psychological Impact of Worklife Instability

Objectives and Procedures: This study examines the long-term social and psychological impact of varying amounts of worklife instability, based on a mail survey of 1,200 engineers and scientists and 1,200 skilled workers—both split between defense and commercial work. Worklife instability is defined as downgrading, frequent job changes, or layoffs resulting from technological obsolescence or cancellation of defense contracts. The study is attempting to find ways of minimizing the negative effects of worklife instability. The researcher postulates that an individual's response to worklife instability depends primarily on his attribution of blame for the instability; his career orientation; and aspects of the work role, organization, and industry within which he locates reemployment.

Estimated Completion Date: By June 1971

1.4.06 UNIVERSITY OF CALIFORNIA, BERKELEY

BERKELEY, CALIF.

GRANT NO. 91-05-69-53

Doctoral Candidate: Stephen R. Engleman, Department of Economics

Sponsor: Dr. Lloyd Ulman

Dissertation: Cost and Performance Incentives for Office of Economic Opportunity Job Corps Contractors

Objectives and Procedures: This study examines the efficiency of contractual arrangements between the Office of Economic Opportunity and private corporations or nonprofit institutions for operating Job Corps centers, which provide training and other services to disadvantaged youth in a residential environment. (Responsibility for the Job Corps program was transferred from OEO to the U.S. Department of Labor on July 1, 1969.) Job Corps and extensive Department of Defense experience with cost-plus-fixed-fee contracts is being analyzed for costs and performance. Mathematical formulation of Job Corps goals is being constructed and an incentive program derived which would both maximize profit for the contractor and yield cost results and goal fulfillment superior to those attained under the present contracting system.

All Job Corps center contracts are being examined, and data collected from OEO on contractor performance. Several centers are being visited, and interviews conducted with officials of the Government and the contractor.

Estimated Completion Date: By June 1971

1.4.07 UNIVERSITY OF CALIFORNIA, BERKELEY

BERKELEY, CALIF.

GRANT NO. 91–05–69–54

Doctoral Candidate: Michael J. Boskin, Department of Economics

Sponsor: Dr. George F. Break

Dissertation: The Working Behavior of the Urban Poor

Objectives and Procedures: This study attempts to estimate the effects of proposed income maintenance programs, such as the negative income tax, wage subsidies, or family allowances, on the work behavior of the urban poor. A labor supply curve for the urban poor is being derived. Equations relating workers' demographic characteristics to their wages are being used to estimate potential earnings for persons not actually working, as a basis for assessing the work incentives that would be associated with various proposals for income maintenance. Data are being drawn from a 1968 survey by the Department of Labor.

Estimated Completion Date: By June 1971

1.4.08 UNIVERSITY OF CALIFORNIA, BERKELEY

BERKELEY, CALIF.

GRANT NO. 91–05–70–13

Doctoral Candidate: Louise Berman, Department of Economics

Sponsor: Dr. Lloyd Ulman

Dissertation: An Analysis of the Labor Market for Policemen

Objectives and Procedures: This study analyzes reasons for the general shortages of qualified police personnel. It is examining the determinants of trends in demand for policemen, sources of supply, incentives for attracting new applicants, wage differentials, the responsiveness of supply to changes in wages, effects of alternative policies, the process and rate of adjustment of supply to demand, and the nature of existing shortages. Data on the labor market behavior of California policemen are being obtained from police departments through interviews and employment records. The costs and benefits of becoming a policeman are being estimated by level of education. Data from a national survey will illustrate the range of recruitment policies and provide a research perspective from which to evaluate the California situation.

Estimated Completion Date: September 1970

1.4.09 UNIVERSITY OF CALIFORNIA, BERKELEY

BERKELEY, CALIF.

GRANT NO. 91–05–70–22

Doctoral Candidate: Robert C. Forthman, School of Social Welfare

Sponsor: Dr. Kermit T. Wiltse

Dissertation: A Group Counseling Social Work Model for Intervention with Urban Hard Core Unemployed Youth

Objectives and Procedures: This study explores the use of group counseling within a broad, employment-oriented model of social work services to help overcome the employment problems of disadvantaged youth. The counseling is given in a 9-month program of weekly sessions with a representative sample of 15 youth—ages 17 to 25—from a low-income neighborhood in San Pablo, Calif.

Data collected during group sessions and individual counseling interviews are being used to measure changes in each participant's perceptions of his present and future employment situation during the program. Supplementary information is being gathered from participants' friends and families and from welfare agency personnel, probation officers, and school officials.

Estimated Completion Date: December 1970

1.4.10 UNIVERSITY OF CALIFORNIA, BERKELEY

BERKELEY, CALIF.

GRANT NO. 91-05-70-42

Doctoral Candidate: Michael D. Hurd, Department of Economics

Sponsor: Dr. Lloyd Ulman

Dissertation: An Explanation of Changing Labor Force Participation Rates

Objectives and Procedures: This study is analyzing recent changes in labor force participation of each age, race, and sex group in the population, with particular attention to the role of wage rates. A model of labor force participation is being developed for each group, starting with the assumption that the individual participation rate depends on the family's decision about maximizing family welfare. Among the other variables to be investigated, the wage rate for each group is the most important, having been neglected in most previous studies despite its theoretical importance. A wage series for each group is being constructed and used in analyzing changes in the ratios of wage rates for the different groups. Both time-series and cross-section analyses are being made, using data from: (1) The 1966 and 1967 Survey of Economic Opportunity, covering 38,000 households; (2) the Current Population Survey, Bureau of the Census: and (3) the Surveys of Consumer Finances, Survey Research Center, University of Michigan.

Estimated Completion Date: March 1971

1.4.11 UNIVERSITY OF CALIFORNIA, BERKELEY

BERKELEY, CALIF.

GRANT NO. 91-05-70-46

Doctoral Candidate: Herman Borenzweig, School of Social Welfare

Sponsor: Dr. Martin Wolins

Dissertation: The Effect of Becoming Employed on Self-Image

Objectives and Procedures: This study measures the effects of receiving training and securing a job on the self-esteem of unemployed disadvantaged workers. Two hundred individuals from two vocational training programs in the San Francisco Bay area are being tested as they enter the programs and 8 months later.

Estimated Completion Date: By June 1971

1.4.12 UNIVERSITY OF CALIFORNIA, LOS ANGELES

LOS ANGELES, CALIF.

GRANT NOS. 91-05-66-09
91-05-67-18

Doctoral Candidate: Robert Singleton, Department of Economics

Sponsor: Dr. Jack Hirshleifer

Dissertation: Labor Force Composition and the Minimum Wage

Objectives and Procedures: This study is testing the proposition that increases in the minimum wage cause unemployment among such groups as the young, older workers, members of minority groups, and the inexperienced. Department of Labor and Social Security Administration data on low-wage workers are being analyzed.

Estimated Completion Date: By June 1971

1.4.13 UNIVERSITY OF CALIFORNIA, LOS ANGELES
LOS ANGELES, CALIF.

GRANT NO. 91-05-70-28

Doctoral Candidate: Barbara Ann Rosenquist, Graduate School of Education

Sponsor: Dr. Melvin L. Barlow

Dissertation: The Impact of Company Training Programs on Reducing the Alienation of the Hard-Core Unemployed

Objectives and Procedures: This study examines organizational policies for assimilating the hard-core unemployed and assesses the impact of these policies on the alienated black employee. Questionnaires are being sent to executives and training and supervisory personnel in 14 Los Angeles firms which use different strategies in their programs for disadvantaged new employees. Analysis of the responses will examine the interaction of program strategy with the characteristics and expectations of the employees and with the adaptability, commitment, expectations, type of control, and ownership of the companies.

Estimated Completion Date: March 1971

1.4.14 CASE WESTERN RESERVE UNIVERSITY
CLEVELAND, OHIO

GRANT NO. 91-37-69-56

Doctoral Candidate: Stephen D. Kornblatt, Division of Special Interdisciplinary Studies

Sponsor: Dr. Eugene S. Uyeki

Dissertation: Factors Affecting the Hiring and Training of Hard-Core Unemployed in the Greater Cleveland Area: A Study in Culture Confrontation

Objectives and Procedures: This study examines the relationship between the organizational structures, attitudes, procedures, and policies of companies employing the hard-core unemployed and the firms' success in hiring, retaining, and advancing these workers, whose culture differs materially from that of their coworkers. At about 60 companies in the Cleveland metropolitan area, representing the spectrum of success, interviews are being conducted with representative executives, managers, union leaders, and coworkers. Additional data on the companies and their new hard-core employees are being obtained through offices operating local manpower programs.

Estimated Completion Date: By June 1971

1.4.15 THE UNIVERSITY OF CHICAGO
CHICAGO, ILL.

GRANT NO. 91-15-68-76

Doctoral Candidate: Laurence E. Devlin, Department of Education

Sponsor: Dr. William S. Griffith

Dissertation: Participation in Adult Education and Occupational Mobility

Objectives and Procedures: This study seeks to discover whether participation in formal adult education courses is positively related to occupational mobility. Interviews are being conducted with 200 employed adult men, either residents of a blue-collar suburb of Chicago where a junior college adult education program is located or registrants in that program. The interviews focus on the incidence of participation in adult education courses and the number and socioeconomic level of all job moves. Secondary data on demographic characteristics, occupational perceptions, early educational experiences, and social behavior are also being collected.

Estimated Completion Date: By June 1971

1.4.16 CLAREMONT GRADUATE SCHOOL
CLAREMONT, CALIF.

GRANT NO. 91-05-69-22

Doctoral Candidate: Donald E. Wise, Department of Economics

Sponsor: Dr. Paul Sultan

Dissertation: Bracero Labor and the California Farm Economy

Objectives and Procedures: This study attempts to measure the effects of the 1964 repeal of Public Law 78, which allowed Mexican nationals to work in the United States on a temporary basis, on California agriculture (production, wages, technology, and wholesale crop prices). It is developing a model to describe the aggregate supply and demand functions for six crops which had made substantial use of bracero labor, based on time-series data for 1960–68 from a variety of sources.

Estimated Completion Date: November 1970

1.4.17 UNIVERSITY OF COLORADO
BOULDER, COLO.

GRANT NO. 91-06-70-38

Doctoral Candidate: James C. Howell, Department of Sociology

Sponsor: Dr. Delbert S. Elliott

Dissertation: A Comparative Study of the Use of Community Volunteers and Probation Officers as Counselors of Juvenile Delinquents on Probation

Objectives and Procedures: This study is comparing the effectiveness of probation officers and volunteers in counseling juvenile probationers, to identify those features of both types of counseling which facilitate the rehabilitation of delinquents and to ascertain what types of probationers are most amenable to each type of counseling. Measures of adjustment in school, family, and community settings are being obtained for two groups of 20 youth who are receiving each type of counseling in Adams County, Colo., and who are matched on the basis of age, offense record, socioeconomic status, minority group membership, and length of probation. Probationers and counselors in both groups are being examined regarding their attitudes toward authority, their view of the world, and their self-concept.

Estimated Completion Date: May 1971

1.4.18 COLUMBIA UNIVERSITY
NEW YORK, N.Y.

GRANT NO. 91-34-66-31

Doctoral Candidate: Myron D. Fottler, Graduate School of Business

Sponsor: Dr. James W. Kuhn

Dissertation: Training of Nonprofessional Manpower in New York City Hospitals

Objectives and Procedures: This study is evaluating retraining programs for nonprofessional hospital workers, particularly practical nurses, nurse aids, and orderlies. Training needs are being determined by examining the relationships among wage rates, necessary skills, sources of manpower supply, and occupational shortages. The evaluation of training effectiveness is being approached through cost-benefit analysis.

Estimated Completion Date: By June 1971

1.4.19 COLUMBIA UNIVERSITY
NEW YORK, N.Y.

GRANT NOS. 91-34-68-20
91-34-69-19

Doctoral Candidate: Carol A. Brown, Department of Sociology

Sponsor: Dr. Terence K. Hopkins

Dissertation: Patterns of Recruitment and Career Development of Health Technicians

Objectives and Procedures: This study examines the mobility of medical technicians: the choice process of those who enter the occupation; hiring and entry processes; the technicians' desires for mobility; and the mobility actually offered by the occupation. Characteristics of current technicians are being ascertained, and recommendations will be made for recruitment of new entrants.

Data are being collected in interviews with current and former technicians from two rural, two urban, and two suburban hospitals. Information from their job applications is also being utilized.

Estimated Completion Date: By June 1971

1.4.20 COLUMBIA UNIVERSITY
NEW YORK, N.Y.

GRANT NOS. 91-34-68-28
91-34-69-18

Doctoral Candidate: Marjorie Hanson Honig, Department of Economics

Sponsor: Dr. Gary S. Becker

Dissertation: The Effect of Welfare Payments on Labor Force Participation

Objectives and Procedures: This study is testing the theory that labor force participation rates of low-income groups decline as the adequacy of welfare programs increases. It explores the relationship between census employment-related data for residents of low-income census tracts in standard metropolitan statistical areas and State data on Aid to Families with Dependent Children. This program offers a fairly clear choice between work and welfare; most of the adult recipients are able-bodied, and welfare rules in the States where most of them live had cost them a dollar of benefits for every dollar earned before some earnings became exempt under the 1967 amendments to the Social Security Act.

Estimated Completion Date: July 1970

1.4.21 COLUMBIA UNIVERSITY
NEW YORK, N.Y.

GRANT NOS. 91-34-68-47
91-34-69-44

Doctoral Candidate: Sally T. Hillsman, Department of Sociology

Sponsor: Dr. Terence K. Hopkins

Dissertation: Induction Into the Apparel Industry: A Study of Young Negro and White Workers

Objectives and Procedures: This project considers whether and to what extent education equalizes job opportunities for minority groups. It focuses on: (1) The employment experience of different ethnic group graduates of the same curriculums at the High School of Fashion Industries in New York City; (2) the influence of the schools' teachers and guidance personnel in channeling students into various paths of the job market; (3) employer and union practices in the job market; and (4) the subjective expectations of jobseekers that affect their career choices.

Statistics on employment and earnings are being obtained through the Social Security Administration. Other information is being gathered through interviews with employers, personnel of the High School of Fashion Industries, the New York State Employment Service, and unions and through questionnaires administered to the senior class and to recent graduates of the school.

Estimated Completion Date: By June 1971

1.4.22 COLUMBIA UNIVERSITY
NEW YORK, N.Y.

GRANT NOS. 91-34-69-11
91-34-70-05

Doctoral Candidate: Deborah S. David, Bureau of Applied Social Research

Sponsor: Dr. Paul F. Lazarsfeld

Dissertation: Career Patterns and Values: A Study of Men and Women in Scientific, Professional, and Technical Occupations

Objectives and Procedures: This study attempts to pinpoint differences in the career patterns of men and women by comparing such variables as fields of specialization, income, current job activities, occupational qualifications, hours worked per week, and weeks worked per year. The study is also considering how age and sex differences in occupational values affect men's and women's career patterns. Data from the 1962 postcensal survey of scientific, professional, and technical manpower are being used to analyze differences within broad occupational groups as well as among specific occupations.

Estimated Completion Date: By June 1971

1.4.23 COLUMBIA UNIVERSITY
NEW YORK, N.Y.

GRANT NOS. 91-34-69-50
91-34-70-63

Doctoral Candidate: Margit A. Johansson, Bureau of Applied Social Research

Sponsor: Dr. Allen H. Barton

Dissertation: The Differential Effects of Reduced Research Funding on University Scientists

Objectives and Procedures: This study is assessing the impact of recent reductions in Federal research funding at a major university. From interviews, questionnaires, and school records, answers are being sought to such questions as: (1) What are the characteristics of the faculty, nonfaculty, and student researchers who do (or do not) continue to receive Federal support? (2) Which researchers sustain productivity despite fund reductions? and (3) How do fund cuts affect researchers' alternative activities, self-esteem, and relations with colleagues?

Estimated Completion Date: By June 1971

1.4.24 COLUMBIA UNIVERSITY
NEW YORK, N Y.

GRANT NO. 91-34-70-06

Doctoral Candidate: Richard H. P. Mendes, Department of Sociology

Sponsor: Dr. Terence K. Hopkins

Dissertation: A Study of the Social Service Employees Union of the New York City Department of Social Services

Objectives and Procedures: Assuming that one cause of dissatisfaction and attrition among social workers is a gap between their commitment and their opportunities to serve, this researcher is exploring whether improving extrinsic rewards (salaries, pensions, job security) through unionization reduces social workers' dissatisfaction with the intrinsic aspects of work. Information is being collected through interviews with leaders of two unions whose membership includes professional personnel from the New York City Department of Social Services, with department administrators, and with city officials, as well as from union and department records and publications. Matters to be investigated include the circumstances of unionization, the unions' policies (particularly regarding the integration of public and self-interests), and their interaction with adversary and supportive groups.

Estimated Completion Date: By June 1971.

1.4.25 COLUMBIA UNIVERSITY
NEW YORK, N.Y.

GRANT NO. 91-34-70-09

Doctoral Candidate: Jeffrey G. Reitz, Department of Sociology

Sponsor: Dr. Robert K. Merton

Dissertation: The Flight from Science: Student Disillusionment with Careers in Science and Engineering

Objectives and Procedures: This study seeks to find out why able students abandon science and engineering. Students who remain in science and engineering and those who do not are being compared with respect to occupational objectives and attitudes, assessments of their own ability, social origins, and the characteristics of their schools. Data collected by the National Opinion Research Center in a survey of a national sample of 41,116 college and university students who graduated in June 1961 are being cross-tabulated and analyzed.

Estimated Completion Date: September 1970

1.4.26 COLUMBIA UNIVERSITY
NEW YORK, N.Y.

GRANT NO. 91-34-70-10

Doctoral Candidate: Sherry Gorelick, Graduate School of Business

Sponsor: Dr. Ivar E. Berg

Dissertation: Incentives and Obstacles to Management Hiring of the Disadvantaged

Objectives and Procedures: This study is analyzing the relationship between black-white income differentials and employer hiring policies in different labor markets to discover the conditions under which managements are most motivated to pursue those policies that are conducive to the equalization of income between blacks and whites.

It is testing the proposition that the maintenance of highly selective screening processes for high-level, high-paying jobs exaggerates income differences between low- and high-level jobs and inflates the labor pool for low-level jobs by keeping most applicants "unqualified" for high-level jobs. Analysis at the macro level is based on statistics from Government sources (such as the Census and Special Labor Force Reports). At the level of the firm, data are being collected through interview from a matched sample of firms (which do or do not engage in programs designed to employ disadvantaged workers) in a few cities selected according to labor market conditions and workforce composition.

Estimated Completion Date: September 1970

1.4.27 COLUMBIA UNIVERSITY
NEW YORK, N.Y.

GRANT NO. 91-34-70-27

Doctoral Candidate: Donald Feldstein, School of Social Work

Sponsor: Dr. Russell A. Nixon

Dissertation: A Credential is Waived: The Experience of College Students Who Have Not Completed High School

Objectives and Procedures: This study is testing the validity of the high school diploma as a credential for higher education by comparing the academic performances of high school graduates and nongraduates enrolled in California community colleges. If the two groups perform at essentially the same level, it is postulated, then the nongraduates are capable of pursuing the higher education required for entry into professional careers in the service industries without lowering the present standards of these professions.

For a sample of students in five community colleges, information is being obtained from college records on major field of study, standard entrance examination grade, grade point average, class grades, age, sex and, where available, veteran's status, family income, race or ethnic background, and economic class or residence area.

Estimated Completion Date: January 1971

1.4.28 COLUMBIA UNIVERSITY
NEW YORK, N.Y.

GRANT NO. 91-34-70-39

Doctoral Candidate: Joseph H. Ball, Department of Political Science

Sponsor: Dr. James S. Young

Dissertation: The Administration of Federal Manpower Programs in New York State: A Study in Federal-State-Local Relations, Program Coordination, and Program Planning

Objectives and Procedures: This study is analyzing interagency relations in operating Federal manpower programs in New York City and New York State. Coordination patterns and program planning arrangements are being examined for the Cooperative Area Manpower Planning System, the Concentrated Employment Program, institutional and on-the-job training programs under the Manpower Development and Training Act, vocational education, and vocational rehabilitation. Special attention is being given to the role of the State and the local employment service in administrative relationships. Data are being collected from publications; Federal, State, and local agency documents and guidelines; and interviews with agency administrators and academic specialists in the manpower field.

Estimated Completion Date: June 1971

1.4.29 COLUMBIA UNIVERSITY
NEW YORK, N.Y.

GRANT NO. 91-34-70-43

Doctoral Candidate: Robert D. Reischauer, Department of Economics

Sponsor: Dr. Jacob Mincer

Dissertation: The Impact of the Aid to Families with Dependent Children (AFDC) Program on Marital Stability, Mobility, and Fertility

Objectives and Procedures: This study is investigating current theories of migration and marriage, adapting these theories to the low-income population, and incorporating the incentives inherent in the welfare system into an analysis of its effects on the structure and migration behavior of poor families. It also seeks to determine if recent modifications of Aid to Families with Dependent Children have alleviated any of the destabilizing effects of the program. The modified theories are being tested empirically, using data from the Commerce Department's 1960 Census, the Survey of Economic Opportunity, and *County Business Patterns.*

Estimated Completion Date: September 1970

1.4.30 COLUMBIA UNIVERSITY
NEW YORK, N.Y.

GRANT NO. 91-34-70-62

Doctoral Candidate: Harriet Zellner, Department of Economics

Sponsor: Dr. Jacob Mincer

Dissertation: An Analysis of Trends in the Relative Educational Attainment, Earnings, and Occupational Distribution of Women, 1900 to 1969

Objectives and Procedures: This project analyzes changes from 1900 to 1969 in the educational attainment, earnings, and occupational distribution of women relative to men. Data classified by age, race, marital status, presence of children, and place of residence are being gathered from publications of the Bureau of the Census, Departments of Labor and of Health, Education, and Welfare, and the National Industrial Conference Board.

Estimated Completion Date: June 1971

1.4.31 CORNELL UNIVERSITY
ITHACA, N.Y.

GRANT NO. 91-34-68-12

Doctoral Candidate: Allan D. Spritzer, New York State School of Industrial and Labor Relations

Sponsor: Dr. Felician F. Foltman

Dissertation: Trade Union Sponsored Programs of Occupational Training in the U.S. Maritime Industry

Objectives and Procedures: This study explores the nature, scope, and results of trade union sponsored programs of occupational training, retraining, and upgrading in the U.S. offshore shipping industry, in an attempt to develop measures of success for these programs.

The objectives, procedures, and results of five union conducted training programs are being studied in interviews with officials connected with those programs. Interviews are also being conducted with officials of other maritime unions which have either less extensive training programs or none at all. Union and Coast Guard records on personal and employment characteristics of current trainees and training program graduates are being supplemented by interviews or mail questionnaires. Shipping employers and government officials are also being interviewed to develop additional criteria of program effectiveness.

Estimated Completion Date: August 1970

1.4.32 CORNELL UNIVERSITY
ITHACA, N.Y.

GRANT NO. 91-34-68-14

Doctoral Candidate: Eliot S. Orton, Department of Economics

Sponsor: Dr. George H. Hildebrand

Dissertation: Components of the Demand for Inexperienced Labor

Objectives and Procedures: This study of the demand for inexperienced workers in a single labor market seeks to identify the reasons that lead employers to hire greater or lesser proportions of inexperienced labor. A random sample of private firms which employ 25 or more workers is being asked to provide the following information for the period 1961 to the third quarter of 1967: Number of accessions to permanent positions; proportion of these who were inexperienced in the broad occupational category for which hired; and the entering wage rate. In addition, the analysis is taking into account variations in the local unemployment rate and in State and Federal minimum wage rates.

Estimated Completion Date: By June 1971

1.4.33 CORNELL UNIVERSITY
ITHACA, N.Y.

GRANT NO. 91-34-68-71

Doctoral Candidate: Robert J. Hines, Department of Economics

Sponsor: Dr. George H. Hildebrand

Dissertation: Econometric Model of Labor Supply in Buffalo Market Based on Time Series Contour Analysis

Objectives and Procedures: This study is testing the hypothesis that a firm whose employment growth rate exceeds the average for similar local firms will also show an above-average rate of wage increase for entry-level jobs. It is analyzing employment and wage data for a 10-year period for a sample of employers in the Buffalo, N.Y., standard metropolitan statistical area. Data for individual firms are to be compared with those for groups (contours) of area firms that share such elements as common unions, similar technology, and similar products.

Estimated Completion Date: By June 1971

1.4.34 CORNELL UNIVERSITY
ITHACA, N.Y.

GRANT NO. 91-34-69-67

Doctoral Candidate: Ross E. Azevedo, New York State School of Industrial and Labor Relations

Sponsor: Dr. N. Arnold Tolles

Dissertation: The Labor Market for Scientific Personnel: The Problem of Allocation and Efficiency

Objectives and Procedures: This study is describing the allocative function of the labor market for scientists and engineers and evaluating the efficiency with which this market operates. It seeks information on the role of employers, employees, and employment services in the processes by which scientists find their initial and subsequent professional jobs. Information is being obtained through interviews and questionnaires with approximately 30 employers in the New York-New England area; numerous engineers, physicists, chemists, and mathematicians; and seven college placement services and four public employment agencies. In addition, data available from government and professional associations are being used.

Estimated Completion Date: June 1971

1.4.35 DUKE UNIVERSITY
DURHAM, N.C.

GRANT NO. 91–35–68–15

Doctoral Candidate: Norville David Crowder, Department of Sociology and Anthropology

Sponsor: Dr. Joel Smith

Dissertation: The Socioeconomic Assimilation of Southern Born Migrants to Other Regions

Objectives and Procedures: This study is attempting to depict the effects of early life experiences in the South on job market participation of migrants from that region. Comparisons of income, education, and occupational prestige are being made for four groups: (1) Migrants born and educated in the South who now live in another region (for example, the Northeast); (2) migrants born in the South and educated elsewhere, now living in the Northeast; (3) native born, nonsouthern educated residents of the Northeast; and (4) migrants to the Northeast who were born and educated in regions other than the South. The primary source is *Accuracy of Data on Population Characteristics as Measured by Reinterviews*, prepared by the Bureau of the Census in 1964.

Estimated Completion Date: December 1970

1.4.36 THE FLORIDA STATE UNIVERSITY
TALLAHASSEE, FLA.

GRANT NO. 91–10–70–25

Doctoral Candidate: Kennith G. Gordon, Department of Vocational Education

Sponsors: Dr. Ralph O. Gallington and Dr. H. Grant Goodell

Dissertation: A Taxonomy of Marine Technicians and Technologists and the Implications for Training Them

Objectives and Procedures: This study is investigating the technical content and educational and training requirements of paraprofessional occupations in marine sciences research. The researcher is interviewing marine technicians and observing them at work to obtain data for developing job descriptions. He will construct a classification of marine technical tasks and test its validity before a panel of marine technologists and oceanographers.

Estimated Completion Date: January 1971

1.4.37 HARVARD UNIVERSITY
CAMBRIDGE, MASS.

GRANT NOS. 91–23–67–42
91–23–69–06
91–23–69–42

Doctoral Candidate: Alexander Korns, Department of Economics

Sponsor: Dr. John T. Dunlop

Dissertation: The Effects of Unemployment and Inflation on Income Distribution in the United States

ing the impact of changes in unemployment and infla-
Objectives and Procedures: This study is examin-

tion on the distribution of income; specifically, the redistributive effects of a 1-percentage point increase in the rate of inflation and of a 1-percentage point decline in the unemployment rate. Data are being drawn from estate tax records and a number of government sponsored or conducted surveys of consumer finances, prices, and labor force behavior. Two factors are being studied for increases in inflation, as measured by the Consumer Price Index: (1) The transfer of wealth from creditors to debtors; and (2) the lag in wages and other remuneration during inflationary periods. Three redistributive effects of changes in unemployment are being considered: (1) Wage losses suffered by persons who lose their jobs; (2) losses in the earnings of factors of production, especially capital; and (3) changes in wage rates.

Estimated Completion Date: By June 1971

1.4.38 HARVARD UNIVERSITY
CAMBRIDGE, MASS.

GRANT NO. 91-23-68-57

Doctoral Candidate: Michael L. Wachter, Department of Economics

Sponsor: Dr. John T. Dunlop

Dissertation: A Wage Model of a Local Labor Market

Objectives and Procedures: This study is attempting to construct a model for projecting wage changes that offers a better description of the wage determination process than the commonly used Phillips curve. For the period when the U.S. economy moved from the low growth and high unemployment rates of the 1950's to the rapid growth and low unemployment rates of the 1960's, the researcher is answering the following questions with regard to three labor markets:

1. Did a single wage equation exist over this period?

2. How were wage relationships among firms altered by changes in the job market?

3. How did wages in different occupations react during this period?

Sources of information include wage data since 1957 for the Boston survey group (40 large firms in the Boston area), similar private surveys in a midwestern and a western city, the Bureau of Labor Statistics' occupational wage surveys, and information from the Boston Division of Employment Security.

Estimated Completion Date: By June 1971

1.4.39 HARVARD UNIVERSITY
CAMBRIDGE, MASS.

GRANT NO. 91-23-70-24

Doctoral Candidate: Samuel A. Rea, Jr., Department of Economics

Sponsor: Dr. John T. Dunlop

Dissertation: The Supply of Labor and the Incentive Effect of Income Maintenance Programs

Objectives and Procedures: This study is concerned with the impact on the labor supply of adult men of public assistance, social security, federally subsidized medical care or education, income maintenance programs, and other antipoverty programs which may affect work incentives. The investigator is using microeconomic data with individuals as the units of observation (March 1967 Current Population Survey). Utility theory and regression techniques are being used to derive a labor supply function for adult men.

Estimated Completion Date: January 1971

1.4.40 HARVARD UNIVERSITY
CAMBRIDGE, MASS.

GRANT NO. 91-23-70-60

Doctoral Candidate: Nancy S. Netting, Department of Social Relations

Sponsor: Dr. Nathan Glazer

Dissertation: Careers of Upward Bound Alumni

Objectives and Procedures: This study follows up a group of young people who have participated in Upward Bound—an intensive 3-year college preparatory program for disadvantaged students with "undeveloped" college potential, who enter the program as high school sophomores.

The prospective sample consists of 100 young people who completed at least 1 year in the program at the University of Hartford—60 who went on to college and 40 who dropped out of Upward Bound and may or may not be in school. The researcher will trace their job and educational histories in individual interviews in an attempt to: (1) Isolate variables which have influenced their decisions during and since participation in Upward Bound; and (2) pinpoint characteristics which distinguish the students who went on to college from those who did not.

Estimated Completion Date: June 1971

1.4.41 UNIVERSITY OF ILLINOIS
URBANA, ILL.

GRANT NO. 91–15–66–52

Doctoral Candidate: Edward W. Haurek, Department of Sociology

Sponsor: Dr. Joseph R. Gusfield

Dissertation: Sociological Determinants of College Aspiration, College Curriculum Choice, and Occupational Aspiration Among Working-Class Adolescents

Objectives and Procedures: This study is testing the hypothesis that the environment of working-class adolescents causes them to differ from middle-class children in the value they place on a college education and in their choice of an occupation.

Data from Project TALENT (explained in **1.4.66**) are being used to compare values and characteristics of middle-class and working-class adolescents. Comparisons include aspirations, achievements, aptitudes, relationship with fellow students, degree of parental supervision, occupational choices, and motivations for college attendance.

Estimated Completion Date: By June 1971

1.4.42 UNIVERSITY OF ILLINOIS
URBANA, ILL.

GRANT NO. 91–15–69–51

Doctoral Candidate: Roger D. Roderick, Institute of Labor and Industrial Relations

Sponsor: Dr. Hugh Folk

Dissertation: An Organizational Analysis of the Hiring of Engineers

Objectives and Procedures: This study applies organization theory to private firms' recruitment and hiring of engineers. It traces firms' development and implementation of hiring goals and recruitment procedures, their adaptation to a short supply of engineers, and their adjustment of future recruitment policies in light of these adaptations. Interviews are being conducted with the recruitment staff at 20 to 25 engineering firms, primarily those engaged in defense operations and research and development. In addition, questionnaires from a sample of June 1969 engineering graduates are being used to validate the firms' reported recruitment practices.

Estimated Completion Date: By June 1971

1.4.43 UNIVERSITY OF ILLINOIS
URBANA, ILL.

GRANT NO. 91–15–70–47

Doctoral Candidate: Roger H. Bezdek, Department of Economics

Sponsor: Dr. Hugh Folk

Dissertation: Manpower Effects of Alternative Patterns of Demand for Goods and Services

Objectives and Procedures: This study is testing the hypothesis that the economic programs and policies corresponding to national priorities are of critical significance in determining the size and composition of the Nation's labor force. The researcher is constructing a model which is capable of translating specified mixes of economic programs into demands for manpower in different industries and occupations and using the model to determine the sensitivity of manpower demands to changes in the pattern of final demand and the feasibility of alternate government programs in terms of manpower resources. Elements of the model are: The distribution of expenditures among economic programs; purchases from each industry required by each economic program; input-output relationships; interindustry employment relationships; industry-occupation relationships; and the specified changes in expenditures. The study relies chiefly on input-output analysis and computerized analysis of national interindustry and employment data. Data for 1960 are being obtained from the Bureau of Labor Statistics, Bureau of the Census, Internal Revenue Service, National Science Foundation, and the Office of Business Economics, as well as from a variety of published materials. The candidate plans to make the computer program, statistical data, and methodology used in his study readily available to other researchers who may be concerned with different mixes of alternative economic programs.

Estimated Completion Date: June 1971

1.4.44 INDIANA UNIVERSITY FOUNDATION
BLOOMINGTON, IND.

GRANT NO. 91–16–68–13

Doctoral Candidate: Robert E. Otlewski, Department of Economics

Sponsor: Dr. Taulman A. Miller

Dissertation: Male Secondary School Teacher Mobility in the State of Indiana

Objectives and Procedures: This analysis of the demographic and economic factors which characterize the geographically mobile teacher, his mobility patterns, and the communications channels used by the teacher and hiring official, is attempting to formulate policy tools which could affect the pattern and incidence of mobility. For male secondary school teachers, statistics collected by the Indiana Department of Public Instruction for the 5 academic years beginning with 1963–64 will be supplemented by questionnaires to: (1) All those who changed school corporations within Indiana during the period June-September 1967; (2) a sample of those who were immobile during that period; and (3) school superintendents in the State.

Estimated Completion Date: By June 1971

1.4.45 THE JOHNS HOPKINS UNIVERSITY
BALTIMORE, MD.

GRANT NO. 91–22–69–27

Doctoral Candidate: Peter Kobrak, Department of Political Science

Sponsor: Dr. Francis E. Rourke

Dissertation: Private Assumption of Public Responsibilities: The Role of American Business in Urban Manpower Programs

Objectives and Procedures: This study examines the implementation of local Job Opportunities in the Business Sector programs (JOBS). (Under JOBS, cooperating companies hire, train, and retain the hard-core unemployed, and the Government reimburses them for the extraordinary costs incurred in training the new disadvantaged employee.) The study considers the JOBS Program as a social system of interacting and interrelated groups. It attempts to develop an approach to program evaluation which allows the assessment and readjustment of program elements according to the program's goals, the trainees' needs, and the employers' requirements.

Interviews are being conducted in New York, Washington, D.C., and Baltimore with members of the following groups associated with the JOBS Program in those communities: The executive goal-setters, the companies' front-line supervisors and personnel staff, trainees, voluntary and public community groups, and governmental and private manpower experts. Questions focus on the goals and methods of each group and decisions made throughout the course of the JOBS Program, particularly those which eventually determined its success or failure.

Estimated Completion Date: August 1970

1.4.46 KANSAS STATE UNIVERSITY OF AGRICULTURE AND APPLIED SCIENCE
MANHATTAN, KAN.

GRANT NO. 91-18-70-17

Doctoral Candidate: William E. Spellman, Department of Economics

Sponsor: Dr. John A. Delehanty

Dissertation: Projections of Occupational Requirements for Kansas in 1980

Objectives and Procedures: This study seeks to develop methodology for forecasting regional occupational requirements, using the State of Kansas as an example. The State's occupational needs in 1980 are being projected on the basis of changes in technology and in growth rates in each industry and are to be compared with national occupational projections. Data sources include: A special survey being done by the Kansas Department of Revenue which will use a sample of tax returns to derive occupation-by-industry data; an input-output matrix of State interindustry relationships constructed by the Kansas Office of Economic Analysis and the Department of Economics at Kansas State; and employment-output ratios for major firms in each industry in Kansas compiled by the Kansas Office of Economic Analysis.

The firms covered in the last-named set of data are being surveyed to determine their occupational structure and any short-run technological changes that will alter the structure.

Estimated Completion Date: October 1970

1.4.47 UNIVERSITY OF MARYLAND
COLLEGE PARK, MD.

GRANT NO. 91-22-70-19

Doctoral Candidate: Bennett Harrison, School of Social Welfare

Sponsor: Dr. Kermit T. Wiltse

Dissertation: Four Studies in the Structure of the Ghetto Economy

Objectives and Procedures: This research aims to extend the candidate's earlier research on the Harlem economy by conducting four studies of labor force and small business behavior in 10 other ghetto areas. The four studies cover: (1) The decision processes by which ghetto families organize themselves so as to maximize their joint income from welfare, wages, and extra-legal activities; (2) a test of the popular hypothesis—which was not supported by the researcher's Harlem study—that increased education is positively associated with weekly wages and negatively associated with the probability of being unemployed; (3) differences and similarities in the employment problems of adult men, teenagers, and "welfare mothers"; and (4) comparisons of the expected and actual densities of employment, by industry, in ghettos to identify industrial activities in which the ghetto is deficient relative to other small urban neighborhoods. For the first three studies, primary data from the November 1966 Urban Employment Survey by the Bureau of Labor Statistics are being used. For the fourth, sources are the Zip Coded Employment and Establishment Census for Illinois and New York conducted by the State employment security agencies in 1968 and the Harlem Business Inventory conducted by the New School for Social Research.

Estimated Completion Date: August 1970

1.4.48 UNIVERSITY OF MARYLAND
COLLEGE PARK, MD.

GRANT NO. 91-22-70-33

Doctoral Candidate: William B. Clatanoff, Jr., Department of Economics

Sponsor: Dr. Paul A. Weinstein

Dissertation: The Utilization of Military Human Capital by Non-Career Veterans of the U.S. Navy

Objectives and Procedures: This study is analyzing those variables in military training and experience that lead the veteran to transfer successfully his military skills to civilian jobs and to exercise his new options for further education and training. Using a sample of 1,084 Navy veterans, the study is also exploring whether the use of service-acquired skills increases veterans' civilian earnings, whether military service enlarges educational and employment horizons more for the less advantaged enlistee, and whether the veterans' net gain (or loss) from military service differs between urban and rural areas.

Data sources include questionnaire returns from a recent survey of military training conducted at the University of Maryland, veterans' records from the Navy Master Inactive Reserve Tape, and county-city data tapes prepared by the Department of Commerce.

Estimated Completion Date: December 1970

1.4.49 MASSACHUSETTS INSTITUTE OF TECHNOLOGY

CAMBRIDGE, MASS.

GRANT NO. 91–23–69–02

Doctoral Candidate: A. Bradley Askin, Department of Economics

Sponsor: Dr. Robert M. Solow

Dissertation: An Economic Analysis of Selected Aspects of Negro Migration

Objectives and Procedures: This study of selected economic aspects of Negro migration among regions of the country, within counties, and within cities seeks answers to three questions:

1. What key demographic and labor force variables affect the migration decisions of Negroes?

2. What effect does Negro migration have on migrants' income, employment, and public welfare received, after other factors are accounted for?

3. How do the causes and effects of migration differ between northern and southern Negroes?

The study is also examining the effects of such factors as changes in employment and standard of living on Negro migration into urban ghettos. Data are being obtained from the 1950 and 1960 censuses and the 1968 study of major ghetto areas by the Bureau of Labor Statistics.

Estimated Completion Date: By June 1971

1.4.50 MASSACHUSETTS INSTITUTE OF TECHNOLOGY

CAMBRIDGE, MASS.

GRANT NO. 91–23–70–11

Doctoral Candidate: Ira Jay Miller, Department of Economics

Sponsor: Dr. Robert M. Solow

Dissertation: Implications of the Phillips Curve Trade-Off for Minority Income and Employment

Objectives and Procedures: This study seeks to ascertain the magnitude and nature of the impact of various levels of economic activity on black economic welfare. The analysis is exploring the trade-offs between unemployment and the black/white income ratio and between inflation and the income ratio. Sources of data include the Current Population Surveys of the Bureau of the Census, the 1960 Census, *Employment and Earnings*, the *Manpower Report(s) of the President*, and studies of urban employment by the Bureau of Labor Statistics. Basic components of the analysis include—in addition to data on unemployment and various forms of incomes—measures of labor force participation, multiple job holding, hours of work, labor turnover, and wage rates.

Estimated Completion Date: September 1970

1.4.51 MASSACHUSETTS INSTITUTE OF TECHNOLOGY

CAMBRIDGE, MASS.

GRANT NO. 91–23–70–23

Doctoral Candidate: Bertram C. Shlensky, Alfred P. Sloan School of Management

Sponsor: Dr. Charles A. Myers

Dissertation: The Determinants of Turnover in On-The-Job Training Programs

Objectives and Procedures: This study is testing the hypothesis that turnover among disadvantaged workers in private on-the-job training programs is inversely proportional to: (1) The quality of the job (salary, skill requirements, promotion opportunities) and its capacity for involving the individual; and (2) the quality of services provided to help trainees see work as an effective mechanism for increasing self-esteem. In case studies of eight Boston firms with varying organizational and training characteristics, data are being drawn from company records on trainees' demographic characteristics, pay rates, skill requirements, and turnover. In addition, training directors, supervisors, staff, and trainees are to be interviewed. An index of job involvement is being developed from independent panel ratings of each job's task variety, motor variety, autonomy in choice of work methods, responsibility, and opportunities for interaction.

Estimated Completion Date: December 1970

1.4.52 MICHIGAN STATE UNIVERSITY
EAST LANSING, MICH.

GRANT NO. 91-24-69-12

Doctoral Candidate: Nancy B. Tuma, Department of Sociology

Sponsor: Dr. Thomas L. Conner

Dissertation: Probability Model of Change of Employment of Mexican Americans

Objectives and Procedures: This study is developing a probability model to describe changes of employment (i.e., frequency of job changes, farm to industrial employment, or vice-versa) among male Mexican American heads of households. Job histories of 624 Mexican American migratory farmworkers collected under a Manpower Administration contract (see **1.1.18**) are being analyzed to ascertain the predictive value of such factors as socioeconomic mobility, geographic mobility, and frequency of migration.

Estimated Completion Date: September 1970

1.4.53 MICHIGAN STATE UNIVERSITY
EAST LANSING, MICH.

GRANT NO. 91-24-69-25

Doctoral Candidate: Jerry N. Judy, Department of Sociology

Sponsor: Grafton Trout

Dissertation: Occupational Specialization, Chain Migration, and the Assimilation of Mexican Americans into Michigan Communities

Objectives and Procedures: This study is examining the history of occupational adjustment of migratory Mexican American farmworkers who have settled in four Michigan towns, using data from an earlier study (see **1.1.18**), supplemented by interviews with (1) persons familiar with the historical patterns of Mexican American settlement in the communities, (2) employers, and (3) persons involved in helping newcomers find employment. The study explores the hypothesis that recent Mexican American settlers, especially those who came to join relatives in the same community, usually seek and find jobs in those occupations in which earlier Mexican American settlers have been employed.

Estimated Completion Date: December 1970

1.4.54 MICHIGAN STATE UNIVERSITY
EAST LANSING, MICH.

GRANT NO. 91-24-69-49

Doctoral Candidate: Charles A. Drake, Department of Sociology

Sponsor: Dr. Philip M. Marcus

Dissertation: Supervision, Technology, and Work Group Behavior

Objectives and Procedures: This study seeks to determine what style of supervision is most appropriate for work groups performing under different technologies. Specifically, it investigates correlations between two styles of supervision—authoritarian and group participative—and such dimensions of technology as differentiation of skills within the work group, extent of education required to perform assigned work tasks, the precision with which workload and performance can be measured, and repetitiveness of tasks. Then, the study attempts to measure the combined impact of supervisory style and technology on the following aspects of work group behavior: Absenteeism, turnover rates, grievances reported, and job performance. Data are being gathered through questionnaires from, interviews with, and records on work groups in research, manufacturing, and industrial relations within a large industrial corporation.

Estimated Completion Date: August 1970

1.4.55 THE UNIVERSITY OF MICHIGAN
ANN ARBOR, MICH.

GRANT NOS. 91–24–67–21
91–24–68–44

Doctoral Candidate: Dorothy M. Herberg, Department of Sociology

Sponsor: Dr. Louis A. Ferman

Dissertation: The Career Patterns of Female Social Workers

Objectives and Procedures: This study attempts to develop typologies of career patterns for women with professional social work training and to explain variations among these typologies. Comprehensive mail questionnaires were sent to 6,000 women between the ages of 40 and 60 who hold master's degrees in the field. The questionnaires requested information on family background, education, current socioeconomic status, marital status, professional practice, other employment experience, and career attitudes.

Estimated Completion Date: By June 1971

1.4.56 THE UNIVERSITY OF MICHIGAN
ANN ARBOR, MICH.

GRANT NO. 91–24–68–07

Doctoral Candidate: Jeffry Piker, Department of Sociology

Sponsor: Dr. Louis A. Ferman

Dissertation: Community Organization, Race, and Entry Into the Work Force

Objectives and Procedures: This study investigates patterns of access to entry-level jobs and the effect of race, community organization, and other variables on such patterns. A theoretical framework is being developed to test appropriate hypotheses regarding the effects of community organization on jobseeking behavior and the effects of race on work force entry.

The analysis is based on data collected between 1962 and 1964 by the Chicago Youth Development project under a grant from the Ford Foundation. These data were drawn from a random sample of 1,260 boys aged 10 to 19 years, 300 mothers, and 200 community leaders in four southwest Chicago neighborhoods, each of which is a high-poverty, high-delinquency area, with an identity stemming from natural boundaries and subcultures. Qualitative knowledge and insights gained in firsthand investigation supplement the analysis of the data.

Estimated Completion Date: By June 1971

1.4.57 THE UNIVERSITY OF MICHIGAN
ANN ARBOR, MICH.

GRANT NO. 91–24–70–14

Doctoral Candidate: Bernard A. Bast, Psychology Department

Sponsor: Dr. Geraldine T. Scholl

Dissertation: A Predictive Study of Employability Among the Visually Impaired with the California Psychological Inventory

Objectives and Procedures: This study has two objectives: To help standardize the California Psychological Inventory (CPI), an instrument for measuring employment-related personality attributes, for a visually impaired population; and to develop a tool for use with the CPI in assessing the job readiness of visually impaired persons. The CPI is being administered to, and information on employment background and qualifications is being obtained from, 100 employable, visually impaired men and women, identified through Michigan community agencies for the blind. The personal data and the test scores will be used to develop a tool for predicting job readiness. The validity of the tool will then be tested by using it to predict the current employment status of a smaller group of visually impaired persons who took the CPI between January 1968 and June 1968 and checking the results against their actual employment status.

Estimated Completion Date: September 1970

1.4.58 THE UNIVERSITY OF MICHIGAN ANN ARBOR, MICH.

GRANT NO. 91–24–70–49

Doctoral Candidate: Barry D. Fine, Institute for Social Research

Sponsor: Dr. Stanley E. Seashore

Dissertation: The Effects of Membership in Work Organizations: A Comparison of Self-Employed and Other-Employed Workers

Objectives and Procedures: This study is exploring the extent to which self-employed people experience psychological advantages or disadvantages (such as satisfaction, adjustment, and autonomy) as a consequence of self-employment and comparing the self-employed with other employed persons with reference to personal, job, and organizational factors bearing upon the psychological consequences. The source of data is a national survey of job attitudes among employed adults conducted in November 1969 by the Institute for the Wage and Labor Standards Administration of the Department of Labor. The present analysis includes the entire sample of 1,533 persons, of whom 207 were self-employed, with appropriate controls for differences in personal and occupational characteristics, as well as a special subsample of approximately 50 pairs (one self-employed and the other not) similar in age, race, sex, and occupation.

Estimated Completion Date: December 1970

1.4.59 THE UNIVERSITY OF MICHIGAN ANN ARBOR, MICH.

GRANT NO. 91–24–70–50

Doctoral Candidate: Elizabeth Ann Rothman, Department of Economics

Sponsor: Dr. Malcolm S. Cohen

Dissertation: Time Patterns of Adjustment in Labor Force Behavior

Objectives and Procedures: This study is analyzing the determinants of changes in labor force behavior among residents of poverty and nonpoverty areas, with particular attention to the possibility that longer-term slum residents are more likely to be engaged in the irregular economy than new arrivals and may therefore have lower rates of labor force participation. Factors to which labor force behavior will be related include personal characteristics, length of residence in the area, economic characteristics of the type of labor market in which the individual originated, current source of income, and participation in job training programs. The study consists of cross-section analyses of data for three separate groups of 7,000 individuals each residing in the Concentrated Employment Program (CEP) areas of New York City, the non-CEP areas of Detroit, and the non-CEP areas of Atlanta. The main source of data is the 1969 Urban Employment Survey by the Bureau of Labor Statistics. Other data are being obtained from *County Business Patterns* and the Current Population Survey, by the Department of Commerce, and from State welfare agency records.

Estimated Completion Date: June 1971

1.4.60 THE UNIVERSITY OF MICHIGAN ANN ARBOR, MICH.

GRANT NO. 91-24-70-51

Doctoral Candidate: Barry Bluestone, Department of Economics

Sponsor: Dr. Malcolm S. Cohen

Dissertation: Wage Rate Determinants of the Working Poor

Objectives and Procedures: This study of low-income workers—particularly those with full-time, year-round employment—is investigating the extent to which their wage rates reflect individual capability as opposed to their race, sex, geographical location, or industry affiliation. Wage determination models are to be tested using data from a recently completed project by the University's Institute of Labor and Industrial Relations which merges the results of the 1967 Survey of Economic Opportunity (SEO) with information from several other Federal surveys to produce a comprehensive set of detailed data on the characteristics of the regions, industries, and individuals in the SEO sample.

Estimated Completion Date: June 1971

1.4.61 THE UNIVERSITY OF MICHIGAN
ANN ARBOR, MICH.

GRANT NO. 91-24-70-56

Doctoral Candidate: Don K. Harrison, Department of Counseling and Guidance

Sponsors: Dr. Garry Walz and Dr. Gerald Gurin

Dissertation: Implications of Similarity-Dissimilarity in Counselor-Counselee Ethnic Match and Its Relevance to Goal Behaviors of Job Trainees

Objectives and Procedures: This study is investigating the conditions under which it may be important for black trainees to have black counselors of similar socioeconomic status and what effects the counselor's race may have on the trainees' achievement of training goals. Assumptions to be tested include: (1) Trainees' attitudes toward the race of the counselor will vary with their age, sex, education, and prior contact with whites; (2) trainees assigned to white counselors will achieve less in training if they start with a negative attitude toward white counselors than if their attitude is more positive; and (3) trainees' attitudes and achievements will be affected by the racial composition of the program's administrators and by the staff's attitudes toward working with disadvantaged trainees.

The sample consists of 40 black trainees and two white and two black counselors (with a professional and a paraprofessional of each color) from each of four training programs (MDTA Skills Center, Work Incentive Program, Concentrated Employment Program, and Job Opportunities in the Business Sector Program) in the Detroit-Toledo and/or Los Angeles areas. Before the start of training, trainees are being inerviewed and rated on racial attitudes and on their probability of achieving the program's standards such as attendance and improvements in skill and education. A parallel attitude scale is being administered in interviewed and rated on racial attitudes and on their selors and trainees are being collected during these interviews and from agency records. At the end of the program, the attitude measure will be readministered to trainees, and counselors and trainees will be interviewed to secure information on the trainees' achievements.

Estimated Completion Date: August 1971

1.4.62 THE UNIVERSITY OF MICHIGAN
ANN ARBOR, MICH.

GRANT NO. 91-24-70-57

Doctoral Candidate: Joseph Katan, School of Social Work

Sponsor: Dr. Irwin Epstein

Dissertation: The Interrelationships Between the Indigenous Non-professionals, the Professionals and the Organization in Human Service Organizations

Objectives and Procedures: This study of disadvantaged workers employed in nonprofessional positions created specifically for them explores the factors which facilitate or impede their integration into, and determine their impact on the structure and operation of, the employing agency. In addition, the study examines the nonprofessional employee's interaction with professional staff members, the effects of interaction on existing professional functions and on the nonprofessional's role, and the characteristics of both groups.

After interviews with directors of all human service organizations in Michigan's Wayne and Washtenaw counties that employ indigenous workers as nonprofessionals, the researcher will select six agencies for intensive analysis. In these agencies, data will be gathered through extended interviews with agency directors, questionnaires to employees, observation, and inspection of agency records.

Estimated Completion Date: July 1971

1.4.63 UNIVERSITY OF MINNESOTA
MINNEAPOLIS, MINN.

GRANT NO. 91-25-69-29

Doctoral Candidate: C. Russell Hill, Department of Economics

Sponsor: Dr. N. J. Simler

Dissertation: Labor Force Participation of the Urban Poor

Objectives and Procedures: This study examines the relative importance of the following on labor force participation rates of the urban poor and nonpoor: (1) Economic factors, such as wage rates, skill level, total family income, and the family's asset and debt position; (2) demographic factors, particularly educational attainment and health; and (3) factors such as experiences in training programs which are thought to influence an individual's taste for work. Data are being used from the Office of Economic Opportunity's survey of 30,000 households in both 1966 and 1967, with emphasis on poor families—whites and other races—with married male heads who worked during the preceding year.

Estimated Completion Date: By June 1971

1.4.64 UNIVERSITY OF MINNESOTA
MINNEAPOLIS, MINN.

GRANT NO. 91-25-70-59

Doctoral Candidate: Robert R. Trumble, Department of Industrial Relations

Sponsor: Dr. Rene V. Dawis

Dissertation: An Analysis of Dropouts from Four Major Manpower Programs—The Neighborhood Youth Corps, Job Opportunities in the Business Sector, Manpower Development and Training, and Job Corps

Objectives and Procedures: This project will use data collected in a current evaluation of four manpower training programs by Operations Research, Inc., and its subcontractor, National Opinion Research Center, under contract with the Office of Economic Opportunity and the Department of Labor. These data consist of test and questionnaire responses reflecting the academic achievement and demographic, situational, and attitudinal characteristics of 6,000-6,675 trainees (including 900-1,300 dropouts) who enrolled between November 1, 1969, and March 31, 1970, in local training projects in 10 standard metropolitan statistical areas.

The researcher is composing profiles of dropouts from each type of program and developing a series of models for predicting the prospects of retention by program, city, and trainee characteristics.

Estimated Completion Date: February 1971

1.4.65 NEW YORK UNIVERSITY
NEW YORK, N.Y.

GRANT NOS. 91-34-66-18
91-34-67-28

Doctoral Candidate: Warren Mintz, Department of Sociology

Sponsor: Dr. Sidney Aaronson

Dissertation: A Study of Variables Involved in the Successful Adaptation of Agricultural Migrant Families

Objectives and Procedures: This study examines the mechanisms by which successful migrant family units are organized. The investigator is acting as a participant-observer in order to collect data on intrafamily relationships and on the relation of the family to the social and economic communities in which it finds work.

Estimated Completion Date: By February 1971

1.4.66 NORTHWESTERN UNIVERSITY
EVANSTON, ILL.

GRANT NO. 91-15-69-35

Doctoral Candidate: Robert B. Wallace, Department of Economics

Sponsor: Dr. Robert Eisner

Dissertation: The Benefits of Public High School Education in the United States.

Objectives and Procedures: For students from different socioeconomic backgrounds, this study attempts to measure the increments in achievement and income that are associated with attending various high schools. The analysis seeks to isolate the influence of school, community, and home variables on changes in a student's achievement test scores between the ninth and 12th grades and to relate his school achievement to his earnings 5 years after graduation, taking account of post-high school training and motivational factors. These measures of the high school's contribution to the individual's achievement, and ultimately to his earnings, will quantify differences among groups of students and the schools themselves. Data are being drawn from Project TALENT (a cooperative effort of the U.S. Office of Education, the American Institutes for Research, and the University of Pittsburgh), under which longitudinal information on selected high schools and students has been collected since 1960.

Estimated Completion Date: September 1970

1.4.67 NORTHWESTERN UNIVERSITY
EVANSTON, ILL.

GRANT NO. 91-15-70-18

Doctoral Candidate: Wendy Lee, Department of Economics

Sponsor: Dr. George E. Delehanty

Dissertation: A Model of the Household Supply of Labor Over the Life Cycle: The Labor Supply Decision of Married School Teachers

Objectives and Procedures: This study is investigating how a household's life cycle characteristics (such as presence of children, husband's income, and family assets) affect the decisions that determine the labor force status of each household member. A dynamic model of the household supply of labor, which incorporates life cycle characteristics as well as the customary measures of consumption and leisure, is being developed and tested with data that are to be collected from a sample of approximately 1,000 married women teaching in Chicago area schools. The questionnaire parallels that used in the Survey of Consumer Finances made by the Survey Research Center of the University of Michigan but requests more detailed data on the wages of household members, life cycle characteristics, assets, and work histories of the teachers.

Estimated Completion Date: October 1970

1.4.68 NORTHWESTERN UNIVERSITY
EVANSTON, ILL.

GRANT NO. 91-15-70-45

Doctoral Candidate: Judith R. Blau, Sociology Department

Sponsor: Dr. Scott Greer

Dissertation: The Structure of Scientific Knowledge: A Study of the Division of Labor, Communication Networks, and the Reward System in Two Scientific Disciplines

Objectives and Procedures: The working hypothesis of this study is that there are three independent social systems which individually and jointly affect the quality and quantity of scientific research: (1) The discipline's subspecialties; (2) the discipline as a whole; and (3) the organizational complex in which scientific activities are carried out. The study is attempting to identify those features of the systems which promote communication, individual prestige, and productivity in two disciplines, theoretical high-energy physics and geophysics. Major sources of data are a 1967 survey by the American Institute of Physics which includes 413 theoretical high-energy physicists in the United States and a comparable survey by the Johns Hopkins University which covered 826 American geophysicists. Published materials are being used to analyze the universities and research centers that comprise the third social system.

Estimated Completion Date: June 1971

1.4.69 THE OHIO STATE UNIVERSITY RESEARCH FOUNDATION

COLUMBUS, OHIO

GRANT NO. 91–37–66–40

Doctoral Candidate: Paul B. Miller, Department of Economics

Sponsor: Dr. Glenn W. Miller

Dissertation: An Analysis of Government Training Programs in Ohio

Objectives and Procedures: This study concerns the work experience of MDTA course graduates in Ohio. Records of employed and unemployed graduates are being analyzed to determine if important differences in their personal and work experiences affect their ability and willingness to adapt to the world of work and their methods of adapting.

Estimated Completion Date: By June 1971

1.4.70 THE OHIO STATE UNIVERSITY RESEARCH FOUNDATION

COLUMBUS, OHIO

GRANT NO. 91–37–70–34

Doctoral Candidate: Thrainn Eggertsson, Department of Economics

Sponsor: Dr. Peter S. Barth

Dissertation: A Cost-Benefit Study of Higher Education Received Under the World War II GI Bill

Objectives and Procedures: This study is comparing the economic costs and benefits of higher education received under the GI bill by World War II veterans. Fundamentally, it attempts to measure the economic experience of veterans who took some college education under the GI bill and to estimate what their experience would have been had they not done so. For these analyses, veterans are being grouped by both prewar educational attainments and the type and amount of education received under the GI bill. Costs and benefits to the veterans, to the Government, and to society are being determined. Data sources on costs include publications of the Veterans Administration, the Bureau of the Census, and the Department of Health, Education, and Welfare. Data on benefits are being drawn primarily from three Current Population Surveys of veterans, made by the Bureau of the Census in 1955, 1963, and 1967.

Estimated Completion Date: March 1971

1.4.71 THE OHIO STATE UNIVERSITY RESEARCH FOUNDATION

COLUMBUS, OHIO

GRANT NO. 91–37–70–55

Doctoral Candidate: Jeanne W. Prodell, School of Home Economics

Sponsor: Dr. Rachel M. Hubbard

Dissertation: A Descriptive Survey of Part-Time Employment in Food Services in Ohio

Objectives and Procedures: This project examines the scope and occupational distribution of part-time employment in food service operations in four major metropolitan areas of Ohio, and the characteristics of the part-time workers. Data are being gathered in interviews with the workers and their employers in 10 commercial firms and 10 health care institutions in each area.

Estimated Completion Date: March 1971

1.4.72 OKLAHOMA STATE UNIVERSITY OF AGRICULTURE AND APPLIED SCIENCE, RESEARCH FOUNDATION
STILLWATER, OKLA.

GRANT NO. 91-38-70-31

Doctoral Candidate: Carl D. Parker, Department of Economics

Sponsor: Dr. David W. Stevens

Dissertation: The Determinants of Hours of Work of Low-Income Family Units: A Statistical Analysis

Objectives and Procedures: In the light of recent concern over building work incentives into proposals for welfare reform, this study is attempting to measure the relationship between work effort (based on hours worked per week and weeks worked per year) and sources of income, levels of income, and health status among low-income families. Estimates are being derived from data collected in 1967 by the Census Bureau in its 30,000-household Survey of Economic Opportunity and an adaptation of Koster's market-nonmarket choice model.

Estimated Completion Date: September 1970

1.4.73 UNIVERSITY OF PENNSYLVANIA
PHILADELPHIA, PA.

GRANT NO. 91-40-70-32

Doctoral Candidate: Howard W. Risher, Department of Industry

Sponsor: Dr. Herbert R. Northrup

Dissertation: The Impact of Technological and Operating Changes on the Railroad Industrial Relations System and Its Manpower

Objectives and Procedures: In this study of adjustment problems faced by management, unions, and workers incident to technological development and attrition in the railroad industry, data from interviews with union and industry personnel and government officials and from case studies of major union-management contracts negotiated since World War II are being analyzed. For comparative purposes, the candidate is compiling a brief, parallel history of developments in air transport.

Estimated Completion Date: March 1971

1.4.74 UNIVERSITY OF PENNSYLVANIA
PHILADELPHIA, PA.

GRANT NO. 91-40-70-54

Doctoral Candidate: Jean C. Darian, Graduate Group in Demography

Sponsor: Dr. John D. Durand

Dissertation: Labor Force Participation of Married Women in the United States: An Investigation of the Role of Occupation

Objectives and Procedures: This study investigates the extent to which the labor force behavior of married women depends on: (1) Changes in employment opportunities in those occupations affording them a relative advantage; (2) competition from members of other secondary labor force groups; and (3) the *type* of work available as well as the availability of work.

Data for married women living with their husbands are being drawn from published reports of the Bureau of the Census and Bureau of Labor Statistics and from taped results of the Survey of Economic Opportunity. The analysis covers the period from 1950 to 1967.

Estimated Completion Date: May 1971

1.4.75 PRINCETON UNIVERSITY
PRINCETON, N.J.

GRANT NO. 91-32-66-20

Doctoral Candidate: Stanley W. Huff, Department of Economics

Sponsor: Dr. Frederick H. Harbison

Dissertation: Hiring Practices, Hiring Standards, and Manpower Development Policies of Selected Employing Institutions in Labor Markets With Differing Rates of Unemployment

Objectives and Procedures: This study compares recruiting, hiring, and wage policies for selected occupations in high and low unemployment labor markets. Interviews are being conducted with personnel managers, employment service officials, guidance counselors, and union officials in adjacent Wheeling, W.Va., and Steubenville, Ohio-Weirton, W.Va.—the high and low unemployment areas, respectively.

Estimated Completion Date: By June 1971

1.4.76 PRINCETON UNIVERSITY
PRINCETON, N.J.

GRANT NO. 91-32-68-19

Doctoral Candidate: Paul Offner, Department of Economics

Sponsor: Dr. Albert Rees

Dissertation: Labor Force Behavior in the Poverty Areas

Objectives and Procedures: This study focuses on the approximately 5,000 urban poverty areas (the lowest fourth of the census tracts in the 100 largest standard metropolitan statistical areas ranked by income, education, skills, housing, and proportion of broken families). Using 1960 census data and more recent information from the Office of Economic Opportunity and the Census Bureau, three influences on the labor force behavior of poverty area residents are being examined: (1) Undertraining and underutilization, in comparison with the population of metropolitan areas as a whole; (2) changing national economic conditions; and (3) the shifting location of industry.

Estimated Completion Date: By June 1971

1.4.77 PRINCETON UNIVERSITY
PRINCETON, N.J.

GRANT NO. 91-32-69-66

Doctoral Candidate: James J. Heckman, Department of Economics

Sponsor: Dr. Albert Rees

Dissertation: Determinants of Household Labor Force Response to Income and Asset Changes

Objectives and Procedures: In order to predict the labor force behavior of married women by age, this project attempts to relate their labor force participation, by age and race, to: (1) The size and source of income changes in their households; (2) their families' assets and debts; and (3) changes in the level and composition of assets. Household data for the period 1960-65 compiled by the U.S. Department of Labor are being used.

Estimated Completion Date: By June 1971

1.4.78 PRINCETON UNIVERSITY
PRINCETON, N.J.

GRANT NO. 91-32-70-01

Doctoral Candidate: Ronald L. Oaxaca, Department of Economics

Sponsor: Dr. Albert Rees

Dissertation: Male-Female Pay Differentials in the Philadelphia Metropolitan Area: A Cross Section Analysis

Objectives and Procedures: This study attempts to find out whether sex differentials in pay depress the labor force participation rates of women in certain age groups. It is analyzing wages as a function of education, experience, age, sex, race, seniority, marital status, presence of dependent children, hours worked in a given period, absenteeism, unionization, percentage of women employees, size of firm, and industry.

Data on individual and establishment characteristics are being collected from a sample of Philadelphia firms and related to the wages of individual office workers. Data from the Bureau of Labor Statistics' Area Wage Survey for Philadelphia are being used to estimate pay differentials between men and women in selected occupations and the relative number of men and women in these occupations.

Estimated Completion Date: June 1970

1.4.79 PRINCETON UNIVERSITY
PRINCETON, N.J.

GRANT NO. 91–32–70–41

Doctoral Candidate: Vernon J. Dixon, Department of Economics

Sponsor: Dr. William J. Baumol

Dissertation: A Determination of Investment Priorities in Urban Black Communities

Objectives and Procedures: In an effort to ascertain the optimal use of resources available to urban black ghettos, this study considers the following investment possibilities: (1) Training unskilled workers for jobs located primarily outside their community; (2) inducing outside firms to relocate or open branch plants in the ghetto; (3) subsidizing resident-owned businesses; or (4) some combination of these possibilities. The relative merits of these investment alternatives are being weighed from the standpoint of the community's specific objectives; i.e., whether it seeks to maximize its share of the gross national product or to increase the level of employment in the area.

The Bedford-Stuyvesant section of Brooklyn, N.Y., which has tried a combination of the three investment possibilities, is the setting for the research. Using data on population trends and labor force participation rates for the area, the researcher is estimating the jobs needed to provide employment for the community's workers. These needs are being compared with estimates of the maximum numbers and costs of employment opportunities that would result from alternative government investments.

Estimated Completion Date: June 1971

1.4.80 PURDUE RESEARCH FOUNDATION
LAFAYETTE, IND.

GRANT NO. 91–16–70–26

Doctoral Candidate: Thomas A. Jeswald, Department of Psychology

Sponsor: Dr. Joseph Tiffin

Dissertation: Psychological and Organizational Factors Affecting Career Patterns in Clinical Laboratory Occupations

Objectives and Procedures: This study is examining patterns of job-related needs, satisfaction, and aspirations of subprofessional laboratory personnel, linking these patterns with mobility or the desire for mobility, and comparing the compatibility of laboratory goals and policies with various career realignment plans. Data will be obtained from questionnaires administered to 1,500 laboratory workers and directors from 200 laboratories in Illinois and Indiana.

Estimated Completion Date: December 1970

1.4.81 STANFORD UNIVERSITY
STANFORD, CALIF.

GRANT NOS. 91–05–66–24
91–05–67–30

Doctoral Candidate: Paul D. Gayer, Department of Economics

Sponsor: Dr. Melvin W. Reder

Dissertation: Manpower Effects of Cuban Immigrant Flows, 1959–66

Objectives and Procedures: This study examines the mechanisms by which the U.S. economy and the Miami, Fla., job market have adjusted to the inflow of Cuban refugees. Local, State, and Federal efforts to cope with the problem are being assessed. A competitive model, constructed from employment service and Cuban Refugee Center data, is being compared with actual market conditions in the Miami area.

Estimated Completion Date: By June 1971

1.4.82 STANFORD UNIVERSITY
STANFORD, CALIF.

GRANT NOS. 91–05–68–56
91–05–69–55

Doctoral Candidate: Jay Siegel, Department of Economics

Sponsor: Dr. Julius Margolis

Dissertation: Intrametropolitan Migration of Minority Groups: Residential Change in Response to Occupational Opportunities

Objectives and Procedures: This study considers whether migration within a metropolitan area by minority group households is a function of change in distance traveled to the job and/or change in the type of housing desired. The study also examines whether jobs for members of minority groups are dispersing from the central business district. Data on minority group members and families with Spanish surnames are being drawn from a 50,000-home interview survey conducted by the Bay Area Transportation Study Commission in 1965 and covering nine counties in the San Francisco area.

Estimated Completion Date: By June 1971

1.4.83 STANFORD UNIVERSITY
STANFORD, CALIF.

GRANT NO. 91–05–70–48

Doctoral Candidate: Robert S. Smith, Department of Economics

Sponsor: Dr. Melvin Reder

Dissertation: A Time Series Analysis of the Cyclical Behavior of Wages, Hiring Standards, and Recruitment Policies in the Clerical Temporary Help Market

Objectives and Procedures: This study of the clerical temporary-help industry is analyzing cyclical and long-run changes in the adjustment of a firm's nonwage policies to changes in local labor market conditions. It also is investigating changes in worker quality (as measured by test scores, educational level, past earnings, and subjective ratings) over the period 1953–68. For 10,000 typists and stenographers employed in the 1953–60 period and in 1968 by the San Francisco office of a nationwide temporary help service, information is being drawn from company files concerning employee characteristics, recruiting and training efforts, selection procedures, unfilled orders (equivalent to job vacancies), and work distribution.

Estimated Completion Date: June 1971

1.4.84 SYRACUSE UNIVERSITY
SYRACUSE, N.Y.

GRANT NO. 91–34–69–26

Doctoral Candidate: John H. Florer, Department of Political Science

Sponsor: Dr. Nelson M. Blake

Dissertation: The National Effort To Acquire Federal Action on Equal Employment Opportunities for Women in the 1960's

Objectives and Procedures: This study is documenting and analyzing private efforts in the 1960's to spur Federal action against sex discrimination in employment. The nature of the drive for equal employment opportunities for women is being related to Federal policies and to Federal legislative, administrative, and judicial actions. The study is using data from official records and published materials, as well as interviews or correspondence with public figures who promoted various actions, with representatives of equal employment interest groups, and with Government officials involved in applications of the law.

Estimated Completion Date: April 1971

1.4.85 THE UNIVERSITY OF TEXAS
AUSTIN, TEX.

GRANT NO. 91-46-70-35

Doctoral Candidate: Judy P. Appelt, Department of Geography

Sponsor: Dr. Robert C. Mayfield

Dissertation: Relationships Between Population Decrease and Tertiary Employment Opportunities in Agricultural Communities

Objectives and Procedures: This study of the impact of declining population on job opportunities focuses on small, agriculturally oriented towns in an effort to: (1) Establish the order in which business and service functions change or disappear, and (2) correlate those functions which show the greatest loss, gain, or alteration of form with changes in opportunities for existing and potential entrepreneurs and employees. Inventories are being made of functions present and opportunities filled for the periods 1950-60 and 1960-70.

The study is based on a stratified random sample of 40 agriculturally based towns in western Kansas whose populations declined between 1950 and 1960. Data are being gathered from secondary sources, field observations, and interviews with a random sample of 375 proprietors, managers, professionals, and skilled workers active in the towns since 1950. In addition to information concerning past and current job opportunities, the interviews are probing the respondents' attributes and their subjective opinions about prospective opportunities within their particular occupations.

Estimated Completion Date: March 1971

1.4.86 TUFTS UNIVERSITY
MEDFORD, MASS.

GRANT NO. 91-23-69-37

Doctoral Candidate: Richard N. Harris, Department of Sociology

Sponsor: Dr. Edwin M. Schur

Dissertation: Recruits and Training Procedures within the Police Academy and Implications for Law Enforcement

Objectives and Procedures: The study analyzes the police academy as a mechanism for training law enforcers. It considers various influences on recruits' behavior and attitude formation, such as the academy's organization and orientation, the staff's attitudes, and the group's norms. The study also examines adaptation of training procedures because of the movement toward professionalism in law enforcement, civil disturbances, and perceived public hostility. Shortly before the end of a 3-month police training program in which the candidate is acting as a participant-observer, a questionnaire will be administered to the recruits. Resulting data will be supplemented by interviews with academy dropouts and graduates in their first months as rookies.

Estimated Completion Date: September 1970

1.4.87 TULANE UNIVERSITY
NEW ORLEANS, LA.

GRANT NO. 91-20-68-55

Doctoral Candidate: Thomas L. Turner, Department of Sociology

Sponsor: Dr. Leonard Reissman

Dissertation: Attitudes Comprising the "Culture of Poverty"

Objectives and Procedures: This study is testing the validity of the concept, "culture of poverty," by contrasting the existence of certain values, norms, and attitudes among the poor and nonpoor. It is measuring the effects of age, family structure, and race on individual adherence to the values, norms, and attitudes of the "culture of poverty." Emphasis is being placed on aspects of the "culture" which hinder the poor in achieving economic security when the opportunity is present. Interviews are being conducted in New Orleans with 125 persons from each of the following groups: Poor whites, poor Negroes, and whites and Negroes whose incomes are above the poverty level.

Estimated Completion Date: By June 1971

1.4.88 UTAH STATE UNIVERSITY
LOGAN, UTAH

GRANT NO. 91-47-68-52

Doctoral Candidate: Gary B. Hansen, Department of Economics

Sponsor: Dr. Felician F. Foltman, Cornell University

Dissertation: Britain's Industrial Training Act: A Case Study in the Development of Public Manpower Policy

Objectives and Procedures: This project explores the impact on Britain's manpower programs and policies of the 1964 Industrial Training Act, which created a national occupational training framework with a range of skill development systems. The objectives of the act were to promote economic growth and modernization in the face of acute shortages of skilled manpower during a period of full employment and increased competition in world markets for the Nation's manufactured products. The study is analyzing those aspects of Britain's manpower programs that might be adapted to meet similar problems in the United States.

Data on the early experience under the 1964 act were analyzed by the researcher for another study (see **3.1.98**). For the present study, extensive interviews and followup interviews have been conducted with practitioners and policymakers in British government, industry, schools, professional and voluntary associations, and private manpower agencies.

Estimated Completion Date: By June 1971

1.4.89 WASHINGTON UNIVERSITY
ST. LOUIS, MO.

GRANT NO. 91-27-69-24

Doctoral Candidate: Marvin H. Kahn, Department of Economics

Sponsor: Dr. Edward Kalachek

Dissertation: Substitution in the Labor Market: A Nonseparable Approach

Objectives and Procedures: This study is concerned with the extent to which elasticity of substitution among capital and different types of labor (labor market inputs) can offset the inflationary effects of capital and labor shortages. Specifically, it investigates post-World War II changes in the elasticity of substitution with respect to workers in different occupations, age-sex groups, and levels of educational attainment. Based on the assumption that all labor market inputs interact with one another inseparably, the study tests the hypothesis that capital can act as either a substitute for or a complement to labor. The study measures the effects on elasticity of substitution of changes in technology, the composition of output, and labor force characteristics, using data from various government sources.

Estimated Completion Date: By June 1971

1.4.90 WASHINGTON UNIVERSITY
ST. LOUIS, MO.

GRANT NO. 91-27-69-38

Doctoral Candidate: Norbert W. Budde, Department of Economics

Sponsor: Dr. Edward Kalachek

Dissertation: Demand and Training for Dental Hygienists

Objectives and Procedures: This study attempts to determine the range of activities, within a dentist's practice, in which a hygienist can substitute for the dentist. The optimal mix of these activities is being determined by the relative cost of dentists' and hygienists' time, in terms of training costs and duration of career. Finally, a demand and supply curve for hygienists is being derived and compared with present training facilities.

Dentists who do and do not employ hygienists are being interviewed concerning the time they spend on various tasks which both they and hygienists can perform, and the total volume of services their practices provide. The demand estimate for hygienists is based on substitution possibilities and the value of the dentists' time in terms of the size of their practices. The supply estimate builds on the results of other studies and takes into account such factors as expected rate of return on investment in training, availability and cost of training, and present competition to enter training.

Estimated Completion Date: July 1970

1.4.91 WASHINGTON UNIVERSITY
ST. LOUIS, MO.

GRANT NO. 91–27–69–65

Doctoral Candidate: Lawrence Slifman, Department of Economics

Sponsors: Dr. Edward Kalachek and Dr. Murray L. Weidenbaum

Dissertation: Occupational Mobility of Disadvantaged Workers

Objectives and Procedures: This study seeks to identify the impact of changes in labor demand on the upward occupational mobility of low-income Negroes and whites and to pinpoint occupations where race and education impede mobility least. It attempts to answer the following questions: (1) For a given degree of labor market tightness, what is the likelihood of upward occupational mobility among these groups, and how does it differ for individuals by race, age, and education? (2) Does the likelihood of upward mobility for low-skilled workers increase as the labor market tightens in higher skilled occupations? and (3) For a given change in labor market conditions, what is the change in the relative flows of whites and Negroes between occupations? The study will use available data on 2,500 low-income families during the period 1964–67.

Estimated Completion Date: June 1971

1.4.92 WASHINGTON UNIVERSITY
ST. LOUIS, MO.

GRANT NO. 91–27–70–21

Doctoral Candidate: Gelvin L. Stevenson, Department of Economics

Sponsor: Dr. Edward Kalachek

Dissertation: Nonwhite Teenagers in the Job Market

Objectives and Procedures: This study is constructing and testing a model to explain why minority teenagers fare so poorly in the labor market. The test uses data from the 1960 Census on the socioeconomic characteristics of white teenagers and those of other races (by age and sex group) and on the population density, occupational structure, public transportation, and labor supply and demand of a given area. The results are expected to shed light on the way in which the employment and unemployment of teenagers of minority races are affected by competition for jobs, the tightness of the labor market, school enrollment, family income, family size, and the area's transportation facilities, occupational structure, and proportion of these youth.

Estimated Completion Date: December 1970

1.4.93 WASHINGTON UNIVERSITY
ST. LOUIS, MO.

GRANT NO. 91–27–70–52

Doctoral Candidate: David E. Berger, Department of Economics

Sponsors: Dr. Richard F. Muth and Dr. Edward Greenberg

Dissertation: An Analysis of Depressed Regions

Objectives and Procedures: This study applies recent theories of regional growth in constructing a model of the dynamics of depressed areas and testing it for depressed labor markets in Pennsylvania for the period 1947–58. Data sources include Census of Business and Census of Manufactures publications.

Estimated Completion Date: August 1971

1.4.94 THE UNIVERSITY OF WISCONSIN MADISON, WIS.

GRANT NOS. 91–53–66–10
91–53–67–16

Doctoral Candidate: Collette Moser, Department of Economics

Sponsor: Dr. Gerald G. Somers

Dissertation: An Evaluation of Area Skill Surveys as a Basis for Manpower Policies

Objectives and Procedures: This study examines the effectiveness of Area Skill Surveys and Training Needs Surveys in providing usable occupational projections. These surveys are conducted by State employment services in order to predict occupational needs for 2 to 5 years. Followup studies are being made of selected Area Skill Surveys to determine the accuracy of their projections. Additional data are being gathered through interviews with employment service officials.

Estimated Completion Date: By June 1971

1.4.95 THE UNIVERSITY OF WISCONSIN MADISON, WIS.

GRANT NO. 91–53–66–26

Doctoral Candidate: Wilbur J. Smith, Department of Economics

Sponsor: Dr. Harold Groves

Dissertation: The Cost and Benefits of Unemployment, Retraining, and Relocation in an Economically Depressed Area: A Case Study of Five Counties in West Virginia

Objectives and Procedures: This study is assessing the costs and benefits of retraining the unemployed in terms of how well course offerings meet the needs of the local job market, increase occupational and geographic mobility, improve employment and earnings, and increase the working life of trainees. It is also determining the effect of certain retraining programs on the amount and kind of social welfare payments. The research utilizes data from interviews, social security files, and analyses of retraining and welfare programs.

Estimated Completion Date: By June 1971

1.4.96 THE UNIVERSITY OF WISCONSIN MADISON, WIS.

GRANT NO. 91–53–66–27

Doctoral Candidate: Jack H. Snyder, Industrial Relations Research Institute

Sponsor: Dr. Gerald G. Somers

Dissertation: Personal and Behavioral Factors Affecting the Supply of the Self-Employed

Objectives and Procedures: This study attempts to uncover the personal and behavioral factors governing the supply of self-employed, to compare owner-managers with hired managers, and to forecast on the basis of personal factors the supply of owner-managers in retail and service industries. Data are being compiled by interviewing and testing a sample of owner-managers and a representative group of hired managers in Madison, Wis.

Estimated Completion Date: By June 1971

1.4.97 THE UNIVERSITY OF WISCONSIN
MADISON, WIS.

GRANT NO. 91–53–66–69

Doctoral Candidate: Walter Hubner, Industrial Relations Research Institute

Sponsor: Dr. Alan Filley

Dissertation: Individual Need Satisfaction in Work and Nonwork

Objectives and Procedures: This study explores blue-collar workers' motivations and the satisfaction they find in work (as opposed to leisure) and in specific jobs (at various skill levels and at different levels of technology). A forced-choice questionnaire is being administered to a sample of workers in jobs ranging from highly skilled to unskilled and from fully automated to artisan in level of technology.

Estimated Completion Date: By June 1971

1.4.98 THE UNIVERSITY OF WISCONSIN
MADISON, WIS.

GRANT NO. 91–53–67–17

Doctoral Candidate: Marilyn Joyce DePoy, Department of Economics

Sponsor: Dr. Gerald G. Somers

Dissertation: A Study of Women in the MDTA Vocational Training Program in the State of Wisconsin

Objectives and Procedures: This study compares female and male trainees in MDTA programs with respect to personal characteristics, type of job training, completion of training, and posttraining experiences in the labor market. Differences will be interpreted in terms of eligibility requirements for training and training allowances and the role of employment service personnel in referring applicants. A detailed, comparative profile of female and male trainees is being compiled from records of 8,500 Wisconsin trainees. These records and labor market data will be supplemented by questionnaires from employment service personnel and, possibly, from a sample of trainees.

Estimated Completion Date: By June 1971

1.4.99 THE UNIVERSITY OF WISCONSIN
MADISON, WIS.

GRANT NO. 91–53–69–07

Doctoral Candidate: John S. Haines, Department of Economics

Sponsor: Dr. W. Lee Hansen

Dissertation: The Effects of Expansion of Technical Knowledge on Productivity

Objectives and Procedures: This study attempts to create a framework for analyzing the extent to which advancing technical knowledge simultaneously decreases the productivity (i.e., earnings) of those engineers whose knowledge is outmoded and increases productivity of those who obtain command of the new knowledge. Measures of the obsolescence of knowledge are being developed from analyses of professional literature, science and engineering curriculums, patent data, and the like. Analysis will then be made to measure the influence of the knowledge variable on earnings of different groups of engineers (by specialty, education, age, etc.).

Estimated Completion Date: By June 1971

1.4.100 THE UNIVERSITY OF WISCONSIN
MADISON, WIS.

GRANT NO. 91–53–69–09

Doctoral Candidate: John W. Hambleton, Department of Economics

Sponsor: Dr. W. Lee Hansen

Dissertation: Determinants of Geographic Differences in the Supply of Physician Services

Objectives and Procedures: This study attempts to measure the influence of several variables underlying the present geographic distribution of physicians as a case study of the incentives which attract highly skilled service workers to depressed urban and rural areas. Specifically, it explores the following questions about the physician's choice of location: (1) What weight does he put on the absence of complementary services? (2) How broadly does he define his "wage"? (3) How is family income level or health insurance coverage related to a person's use of physician services? Data on these questions and on the distribution of doctors for the census tract areas in 50 major cities and for rural counties throughout the United States—both grouped by income level in the area—are being analyzed.

Estimated Completion Date: August 1970

1.4.101 THE UNIVERSITY OF WISCONSIN MADISON, WIS.

GRANT NO. 91-53-69-41

Doctoral Candidate: Andrew J. Winnick, Department of Economics

Sponsor: Dr. Glen G. Cain

Dissertation: The Characteristics, Education, and Earnings of Technicians and Other Semi-Professional Workers

Objectives and Procedures: For designers, draftsmen, surveyors, medical and dental technicians, electrical and electronic technicians, and engineering and physical science technicians, this study is relating education and training to earnings and examining the economic return on different combinations and amounts of training. The analysis takes into account variations in personal characteristics which may affect earnings. Data for the analysis are being drawn from the 1962 postcensal survey of scientific, professional, and technical manpower and the 1960 1/1,000 sample census.

Estimated Completion Date: September 1970

1.4.102 THE UNIVERSITY OF WISCONSIN MADISON, WIS.

GRANT NO. 91-53-69-45

Doctoral Candidate: Richard S. Toikka, Department of Economics

Sponsor: Dr. Glen G. Cain

Dissertation: Supply Responses of the Unemployed

Objectives and Procedures: This study seeks to relate such labor supply decisions of the unemployed as adjustment of asking wage, willingness to change occupation or residence, intensity of jobseeking effort, and dropping out of the labor force, to the following: (1) Their demographic characteristics, occupation, and labor force experiences; (2) the probability of job placement for particular groups; and (3) wages received in new employment. The analysis is based on survey data gathered by government agencies and private researchers.

Estimated Completion Date: August 1970

1.4.103 THE UNIVERSITY OF WISCONSIN MADISON, WIS.

GRANT NO. 91-53-70-08

Doctoral Candidate: John F. Baum, Department of Economics

Sponsor: Dr. Gerald G. Somers

Dissertation: An Experimental Analysis of Training for Disadvantaged Workers Under the Job Opportunities in the Business Sector (JOBS) Program

Objectives and Procedures: This study is comparing costs and outcomes of current approaches to training used by National Alliance of Businessmen (NAB) firms participating in the Job Opportunities in the Business Sector (JOBS) Program. A sample of 180 disadvantaged trainees and 120 other new employees of NAB-JOBS firms in Dallas has been randomly divided into three training groups, each of which simulates a major alternative approach available to NAB-JOBS firms. For each of the three groups, the disadvantaged trainees and the other employees are being compared with respect to sociopsychological and economic characteristics and pretraining and posttraining job performance and attitudes.

Estimated Completion Date: December 1970

1.4.104 THE UNIVERSITY OF WISCONSIN MADISON, WIS.

GRANT NO. 91–53–70–20

Doctoral Candidate: Myron Roomkin, Industrial Relations Research Institute

Sponsor: Dr. Gerald G. Somers

Dissertation: An Evaluation of the MDTA Adult Basic Education Program in Milwaukee, Wisconsin

Objectives and Procedures: This study of MDTA programs of adult basic education in Milwaukee is assessing the effects of adult basic education on the graduates' net economic position (measured by occupational growth and earnings); their foundation for job training; their proficiency in reading, writing, and computation; their perspective on such matters as work, community, homelife, and training; and their self-image. Data are being collected through interviews and from employment service files for three sample groups: 200 men who completed either of the two programs now active in Milwaukee; 50 who dropped out of the programs; and 50 who were eligible for but did not enter the program.

Estimated Completion Date: October 1970

1.4.105 YALE UNIVERSITY NEW HAVEN, CONN.

GRANT NO. 91–07–68–59

Doctoral Candidate: Bruce R. McKellips, Department of Economics

Sponsor: Dr. Mark W. Leiserson

Dissertation: Negro Migration and the Urban Complex: Some Implications for Public Policy

Objectives and Procedures: This study is evaluating the structure and dynamics of Negro migration in order to suggest policies on migration to central cities. It uses data from the 1960 Census on gross and net migration into and out of States and standard metropolitan statistical areas.

Estimated Completion Date: By June 1971

1.4.106 YALE UNIVERSITY NEW HAVEN, CONN.

GRANT NO. 91–07–69–46

Doctoral Candidate: Donald D. Bowen, Department of Administrative Sciences

Sponsor: Dr. Douglas T. Hall

Dissertation: An Evaluation of Motivational Similarity in Work Groups

Objectives and Procedures: This study explores two possible sources of similar needs for achievement, affiliation, and power which have been discerned among members of work groups: (1) Selection of group members, formally by managers and informally by other group members; and (2) socialization through group interaction. The study also assesses the influence of similar needs on such aspects of group operation as productivity and job satisfaction of its members. Questionnaires are being given to members of 15 to 20 work groups, and interviews are being conducted with supervisors and selected employees.

Estimated Completion Date: July 1970

1.5 PROJECTS ACTIVE ON JUNE 30, 1970—Research Project Grants Under the MDTA[15]

1.5.01 U.S. DEPARTMENT OF AGRICULTURE, GRADUATE SCHOOL WASHINGTON, D.C.

GRANT NO. 91-09-70-61

Principal Staff: Robert B. Schwenger, International Trade and Commercial Policy

Project Title: Costs and Benefits to U.S. Manpower of Adjustment to Foreign Trade Changes: Exploratory Study Directed Toward a New Approach

Objectives and Procedures: This study is developing a framework for quantifying the impact on U.S. manpower of such influences on foreign trade as the following: (1) The worldwide acceleration of technological and economic advance; (2) the growing portion of world trade and production that is coming under the control of quasi-entrepreneurial, multicountry operations; and (3) transitions in the methods of intergovernmental economic negotiations.

Based on literature on the adjustment question and on interviews with trade specialists, the project is assessing all dimensions of the costs and benefits to U.S. manpower of several recent trade changes.

Estimated Completion Date: April 1971

1.5.02 ATLANTA UNIVERSITY ATLANTA, GA.

GRANT NO. 91-11-69-33

Principal Staff: Dr. David E. Kidder, Center for Manpower Studies

Project Title: Negro and White Perception of Company Employment Policy in the South: Case Studies in Rural and Urban Nonfarm Sectors

Objectives and Procedures: This is the first phase of a planned three-part study of the racial structure of labor force migration from the South. The entire project will investigate possible relations between Negro and white workers' out-migration and their perceptions of nonfarm employment opportunities in the South, successful enforcement of the 1964 Civil Rights Act, and noneconomic factors in their decisions to migrate.

The present study attempts to contrast Negro and white workers' perceptions of the availability to them of nonfarm employment in urban and rural areas of the South. Random samples of employees from the 100 largest companies in Atlanta and from several new firms in rural Georgia and Alabama are receiving questionnaires covering the following: (1) The company's equal employment opportunities policy; (2) job classifications; (3) racial composition of the work force; and (4) recruitment and upgrading procedures. Analysis of workers' perceptions takes into account their occupations, rural or urban locations, and demographic characteristics.

Estimated Completion Date: By June 1971

1.5.03 BOWDOIN COLLEGE BRUNSWICK, MAINE

GRANT NO. 91-21-69-43[16]

Principal Staff: Dr. John C. Donovan, Department of Government and Legal Studies

Project Title: British Manpower Policy and the Process of Institutional Change

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[15] Requests for information concerning these grants should be directed to the principal staff.

[16] This project is funded jointly with the Ford Foundation.

Objectives and Procedures: This study examines the relationship between the substance of recent British manpower policy and the policy actually effected through institutional and administrative arrangements. It focuses on the influence exerted on manpower policy by national economic policies, private groups, and key government officials and compares British and American experiences. British government officials, representatives of management and labor unions, and academic experts are being interviewed; manpower training centers and employment offices are being visited; and government documents are being examined.

Estimated Completion Date: By June 1971

1.5.04 BOWLING GREEN STATE UNIVERSITY
BOWLING GREEN, OHIO

GRANT NOS. 91–37–66–71
91–37–67–39

Principal Staff: Dr. Robert M. Guion, Department of Psychology

Project Title: The Meaning of Work and Its Relation to the Development of the Motivation to Work

Objectives and Procedures: This study of young men leaving school (colleges, trade schools, and high schools) to enter engineering and factory jobs is attempting to find out what their concepts of work are, how these concepts develop on the job, and how they affect the men's motivation. Extensive preemployment tests are used to classify each new employee as "task oriented," "socially oriented," or "self-oriented," and coworkers' ratings are used to assess his motivation. The group with which he starts work is classified as "work oriented" or "not work oriented." For each classification, the relationship between concepts of work and motivation is to be analyzed.

Estimated Completion Date: By June 1971

1.5.05 BUREAU OF SOCIAL SCIENCE RESEARCH, INC.
WASHINGTON, D.C.

GRANT NO. 91–09–69–31

Principal Staff: Dr. Albert D. Biderman

Project Title: Recent Second Career Patterns of Military Retirees

Objectives and Procedures: This study examines certain aspects of the labor force participation of men who have retired from the Armed Forces after a career of 20 or more years: (1) Their difficulty in recent years in finding good jobs; (2) their present employment status as related to age at retirement, present age, education, rank, and year of retirement; (3) impact of legislation barring dual compensation for retired military personnel employed by the Federal Government; and (4) their use of employment assistance under programs recently initiated by the Departments of Labor and Defense.

This study will supplement and update earlier analyses, including one sponsored by the Manpower Administration (see **3.1.08**). Data for the present study are being drawn from a 1966 Department of Defense survey of a 25-percent sample of retired military personnel.

Estimated Completion Date: By June 1971

1.5.06 UNIVERSITY OF CALIFORNIA, BERKELEY
BERKELEY, CALIF.

GRANT NO. 91–05–67–61

Principal Staff: Dr. Lloyd Ulman, Director, Institute of Industrial Relations

Project Title: A Study of Changing Skill Requirements in the Building Trades

Objectives and Procedures: This study analyzes changing labor requirements in the crafts, particularly carpentry, involved in the homebuilding industry. It is constructing data for various crafts on man-hours required per square foot of floor space in typical tract and nontract houses built in Alameda County (Calif.) between 1930 and 1965. The study will explore the usefulness of these data in developing projections of manpower demand in homebuilding. Information is being derived from county building permits, architects' records, National Association of Homebuilders' files, estimators' handbooks for the period under study, and discussions with persons in the homebuilding industry.

Estimated Completion Date: By June 1971

1.5.07 UNIVERSITY OF CALIFORNIA, BERKELEY
BERKELEY, CALIF.

GRANT NO. 91–05–70–37

Principal Staff: Dr. Robert E. Hall, Institute of Industrial Relations

Project Title: Exploratory Empirical Research on the Pathology of Secondary Labor Markets

Objectives and Procedures: This study is estimating the impact of protective institutions and measures (such as labor unions, professional and occupational licensing standards, and formal educational requirements for white-collar jobs) on relative wages and on the secondary labor force (workers other than adult, male heads of households). It is testing the hypothesis that a chronic excess of workers in the labor market can be attributed to the desire of secondary workers for the high-wage, protected jobs from which they are excluded regardless of qualifications and is a basic cause of the unsatisfactory functioning of secondary labor markets.

The Survey of Economic Opportunity, conducted in 1966–67 by the Bureau of the Census and compiled jointly by the Office of Economic Opportunity and the Brookings Institution, is the basic data source for this project. Survey files consist of a self-weighting, 1/3,000 sample of the U.S. population and a sample of equal size of households in poverty areas.

Estimated Completion Date: September 1970

1.5.08 COLUMBIA UNIVERSITY
NEW YORK, N.Y.

GRANT NO. 91–34–67–58

Principal Staff: Dr. Herbert Hyman, Chairman, Department of Sociology

Project Title: Occupational Choice and Its Determinants Among Totally Blind Individuals

Objectives and Procedures: As part of a larger study of the patterns of communication, perception, and social behavior among the blind, this study examines blindness as a barrier to gaining knowledge of environment, and consequently, to choosing a career. Patterns of occupational choice are being contrasted between blind Negroes and whites and between those blinded before the age of 15 years and those blinded later in life. The developmental processes underlying these patterns are being examined through a parallel study of totally blind children and their families.

The present analysis is based on the following groups drawn from the sample of the total study: 180 white and 90 Negro adults, totally blind, living in northern cities; and 80 white and 20 Negro children, totally blind, 10 to 15 years of age, living in New York City. Indepth interviews have been held with the adults, and a sighted family member was also interviewed concerning the blind person's immediate and larger environment and how he had been socialized or resocialized. Parallel interviews were conducted with the children; their mothers were questioned about the patterns of childrearing followed with the blind child and with his siblings; and sighted siblings were interviewed whenever available regarding their own development within the family and their orientation toward the blind child. Computer analysis is being used to trace individual and aggregate patterns of learning.

Estimated Completion Date: By June 1971

1.5.09 COLUMBIA UNIVERSITY
NEW YORK, N.Y.

GRANT NO. 91–34–68–26

Principal Staff: Dr. William J. Goode and Dr. Cynthia F. Epstein, Department of Sociology

Project Title: Social Factors Affecting Utilization and Mobilization of Trained Personnel in Elite Occupations

Objectives and Procedures: This study focuses on members of social groups and social categories (such as women and minority group members) whose participation in prestige occupations (such as law and scientific research) is effectively blocked by self-exclusionary practices and pressures from outside the economic sphere. Information from interviews, census data, and relevant literature is being analyzed to answer the following questions:

1. Which occupational environments are particularly conducive to the use of professionals whose social origins or attributes are not typically associated with the occupation?

2. What are the consequences for occupational mobility, achievement, and productivity of socioeconomic backgrounds that do not conform to the commonly accepted model?

3. What changes in social institutions would increase demands for the talents of professionals from social groups previously blocked from the elite occupations?

Estimated Completion Date: By June 1971

1.5.10 CORNELL UNIVERSITY
ITHACA, N.Y.

GRANT NO. 91-34-69-30[17]

Principal Staff: David Moore, New York State School of Industrial and Labor Relations

Project Title: Development of an Industrial Relations Information Service (IRIS)

Objectives and Procedures: This project is developing and bringing to a fully operational level a comprehensive information system in industrial relations to serve scholars and professionals in universities, private industry, government, and labor. Liaison is being sought with related information systems, such as the U.S. Office of Education's Educational Resources Information Center, the Smithsonian Institution's Science Information Exchange, and the Central Library and Documentation Branch of the International Labour Office in Geneva.

This project builds on the findings of a feasibility study partially supported by a Manpower Administration grant (see **3.5.26**). In addition, the present project continues earlier research in techniques of indexing and abstracting services and of packaging and delivering industrial relations information.

Estimated Completion Date: June 1971

1.5.11 UNIVERSITY OF HOUSTON
HOUSTON, TEX.

GRANT NO. 91-46-68-48

Principal Staff: Dr. Louis H. Stern, Department of Economics and Finance

Project Title: Relationship Between Unemployment and Commuting Within Geographical Areas

Objectives and Procedures: This pilot study is considering whether 15 regions delineated as standard metropolitan statistical areas (SMSA's) are actually adequate for labor market analyses. Using 1960 census data, it seeks to determine whether an SMSA's unemployment rate is an appropriate economic indicator for any of its geographic subdivisions by testing the hypothesis that commuting to jobs within the area generally equalizes unemployment rates among the residents of different geographic subdivisions who are in the labor force if allowance is made for differences in occupation, sex, and racial or ethnic group.

Estimated Completion Date: By June 1971

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[17] Most financial support for this study is being provided by industrial relations centers at 14 universities.

1.5.12 HOWARD UNIVERSITY
WASHINGTON, D.C.

GRANT NO. 91-09-70-36

Principal Staff: Dr. Martha T. Mednick, Department of Psychology

Project Title: Motivational and Personality Factors Related to Career Goals of Black College Women

Objectives and Procedures: This study of occupational choice among Negro college women is examining variations in occupational choice and levels of career commitment and achievement motivation between black college women today and those surveyed 5 to 10 years ago by various researchers. Questionnaires and tests to measure achievement motivation, fear of failure, originality of occupational choice, career commitment, perceptions of femininity, and militancy are being administered to samples of black college women from a predominantly black university, an integrated urban university, and an integrated rural college.

Estimated Completion Date: June 1971

1.5.13 INDIANA UNIVERSITY FOUNDATION
BLOOMINGTON, IND.

GRANT NOS. 91-16-66-32
91-16-67-40

Principal Staff: Dr. C. L. Christenson and Dr. W. H. Andrews, Department of Economics and Division of Economic Research

Project Title: A Study of Labor Force Adaptation to Technical Change in the Coal Industry

Objectives and Procedures: This study analyzes changing skill requirements and adjustment problems incident to rapid technological development in the U.S. bituminous coal mining industry. The experience of the industry between 1956 and 1965 is being examined to determine how productivity and employment changes are related to such variables as geographic distribution of production, production in different types of mines, labor productivity, extent of total or partial unemployment, and degree of regional economic development in the areas involved. The adequacy of arrangements for retirement, transfer, and retraining of workers displaced during this period is being assessed.

Estimated Completion Date: By June 1971

1.5.14 LOUISIANA STATE UNIVERSITY
NEW ORLEANS, LA.

GRANT NO. 91-20-70-30

Principal Staff: Dr. Theresa R. Shapiro

Project Title: Negro Construction Contractors in New Orleans

Objectives and Procedures: This pilot study examines the backgrounds, business practices, needs, and problems of Negro entrepreneurs in the New Orleans construction industry, with special attention to the relationship between contractors and subcontractors in residential construction. The analysis is based on interviews with 200 Negro contractors and subcontractors. (See also **1.1.17.**)

Estimated Completion Date: September 1970

1.5.15 UNIVERSITY OF MASSACHUSETTS
AMHERST, MASS.

GRANT NO. 91-23-66-55

Principal Staff: Dr. Everett S. Lee, Department of Sociology and Anthropology

Project Title: Spatial Mobility and Manpower Development

Objectives and Procedures: This study examines the implications for manpower development and training of migration to, from, and within the States of Pennsylvania and Mississippi. Census data are being used to determine the extent to which the two States are dependent upon manpower from other States, the extent to which the two States are developing manpower for other States, and the types of manpower migrating to and from the two States. Standard demographic techniques of analysis are being applied to the volume or rate of in- and out-migration for specific race-sex-education-age groups.

Estimated Completion Date: By June 1971

1.5.16 UNIVERSITY OF MASSACHUSETTS AMHERST, MASS.

GRANT NO. 91-23-68-27

Principal Staff: Solomon Barkin, Labor Relations and Research Center

Project Title: A Study of National Manpower Policies in OECD Countries

Objectives and Procedures: This study attempts to distill lessons for current manpower programs in the United States by analyzing the experience of the countries belonging to the Organisation for Economic Cooperation and Development (OECD) and the research generated by OECD. Considering the manpower field as an integrated system, the study covers the following subjects: Objectives; national economic and social problems; systems for determining priorities for their solutions; policymaking systems; research; statistics and data collection resources; administration of recruitment; development of the appropriate quality of manpower; stimulation of the demand for labor; organization and operation of the job market; systems of enterprise; and programs for optimum productivity of the work force.

The researcher is drawing on the resources and knowledge acquired during 5 years with the Manpower and Social Affairs Directorate of the OECD, supplemented by correspondence with officials in the OECD and member countries.

Estimated Completion Date: October 1970

1.5.17 UNIVERSITY OF MASSACHUSETTS AMHERST, MASS.

GRANT NO. 91-23-69-20

Principal Staff: Solomon Barkin, Labor Relations and Research Center

Project Title: Manpower Policy and Programs: Tools for Economic Policy—A Planning Project

Objectives and Procedures: This project explores the interrelationships between economic and manpower policy objectives, instruments, measures, and behavior, as developed in the Federal Government. A series of studies are being outlined in the following major areas: (1) Manpower aids to the promotion of economic objectives; (2) manpower aspects of the impact of major economic tools; (3) economic measures for advancing manpower objectives; and (4) economists' tools in the development of manpower programs.

The project will result in: (1) A report outlining the various aspects of the relationship between economic and manpower policy; and (2) a specific plan for a series of seminar meetings at which the subjects of highest priority would be discussed on the basis of policy-oriented papers to be prepared by subject-area specialists. In addition, an annotated bibliography is being compiled of current writings on the topics considered in the program.

Estimated Completion Date: December 1970

1.5.18 MICHIGAN STATE UNIVERSITY EAST LANSING, MICH.

GRANT NO. 91-24-66-30

Principal Staff: Dr. Michael E. Borus, School of Labor and Industrial Relations

Project Title: Research To Demonstrate the Uses of Unemployment Insurance Wage Reports

Objectives and Procedures: This project seeks to demonstrate the potential value of individual wage reports as a source of information in the study of manpower problems. Three substudies of data from the wage reports are being made: (1) Workers' earnings and unemployment experience after retraining are being examined to supplement and check the validity of information derived from present retraining followups and to determine which groups profit most from retraining; (2) the costs and benefits of various vocational education programs are being compared; and (3) the accuracy of data obtained through personal interviews and mail questionnaires is being checked against parallel information secured from the wage reports and social security records.

Estimated Completion Date: By June 1971

1.5.19 THE UNIVERSITY OF MICHIGAN
ANN ARBOR, MICH.

GRANT NO. 91–24–67–56

Principal Staff: Dr. Louis A. Ferman, Institute of Labor and Industrial Relations

Project Title: Study of the Correlates of Long-Term Unemployment

Objectives and Procedures: This study is concerned with the degree of influence exerted by age, education, literacy, and race on the prolongation of unemployment. Statistical techniques are being used to isolate these interlocking variables and measure their relative contribution to long-term unemployment; to the occupational and geographical mobility of the long-term unemployed; and to the willingness and capacity of these workers to seek retraining, as well as their capacity to score satisfactorily on vocational tests in order to qualify for a job or training program.

The researcher is using data from a 1962 study by the Michigan Employment Security Commission of 2,114 Detroit residents who had been unemployed 26 weeks or longer, and from 1964 and 1966 followup vocational tests, counseling, and interviews with subsamples of this group. Other demographic and ecological data associated with Detroit inner-city areas are being used to relate the characteristics of inner-city life to the employment patterns of residents.

Estimated Completion Date: By June 1971

1.5.20 THE UNIVERSITY OF MICHIGAN
ANN ARBOR, MICH.

GRANT NO. 91–24–68–41

Principal Staff: Dr. Martin Gold, Institute for Social Research

Project Title: An Agency's Effort to Improve the Future of Adolescent Boys in the Inner City

Objectives and Procedures: This study is assessing the impact on adolescent boys of a 1961–65 experimental program of the Chicago Boys Club which sought to combat juvenile delinquency in two inner-city target areas. In addition to the club's traditional building-centered recreational activities, the program provided academic and vocational counseling and job placement and worked with community institutions to increase vocational education, apprenticeship, job, and recreational opportunities.

The data for this analysis were collected during the program. Two control areas with matching demographic characteristics were constructed from surrounding census tracts. Variables relevant to the condition of the populations and goals of the program were measured at the beginning and end of the program. Data were collected through interviews with representative samples of the boys in each area who were and were not participating in the program, their mothers, community leaders, and personnel throughout the Chicago Boys Club organization. Further material was gathered from police, court, and school records on the behavior and performance of the boys in the study, and the boys themselves provided information on their aspirations, perception of opportunities, current plans and efforts to prepare themselves for future employment, and school attitudes and performance.

Estimated Completion Date: By June 1971

1.5.21 THE UNIVERSITY OF MICHIGAN
ANN ARBOR, MICH.

GRANT NO. 91–24–69–47[18]

Principal Staff: Dr. Sandra S. Tangri, Institute for Social Research

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[18] Formerly Grant No. 91–24–69–04.

Project Title: Effects of Background, Personality, and College Experience on Women's Post-Graduate Employment

Objectives and Procedures: This project follows up the researcher's dissertation, which associated background factors, personality characteristics, and college experiences of 200 college women with commitments to traditionally masculine professions. Using interviews and mail questionnaires, the present study attempts to answer the following questions about these same women 3 years after graduation:

1. What factors associated with aspirations predict perseverance in the chosen field?
2. What factors affect occupational commitment?
3. For what kind of woman does early marriage make career pursuits more likely?
4. What role do husbands play in these outcomes?

Estimated Completion Date: August 1970

1.5.22 THE UNIVERSITY OF MICHIGAN
ANN ARBOR, MICH.

GRANT NO. 91-24-70-15

Principal Staff: Joseph Veroff, Survey Research Center

Project Title: Components of Achievement Motivation as Predictors of Potential for Economic Change

Objectives and Procedures: This study is developing measures for differentiating between a job trainee's motivation to succeed and his expectation of success and for determining which of these measures is the best predictor of job success.

Three groups of 50 subjects each are responding to tests measuring motivation and behavior, such as performance levels after success and after failure. One group is being tested during the orientation period of the training program, the second is being tested when training is almost completed, and the third is being tested and interviewed 6 months after completing the program. Followup data on economic success are being obtained from training center records.

Estimated Completion Date: September 1970

1.5.23 NATIONAL BUREAU OF ECONOMIC RESEARCH, INC.
NEW YORK, N.Y.

GRANT NO. 91-34-70-58

Principal Staff: Dr. Finis R. Welch

Project Title: The Effects of Federal Minimum Wage Legislation on the Cyclical Stability of Aggregate Employment and on the Industrial Distribution of Teenage Employment

Objectives and Procedures: This study builds on a recently completed analysis of the effects of minimum wages on the employment stability of different race-sex groups of the teenage labor force. The extent of minimum wage coverage by industry is being examined to determine whether greater coverage in a given industry relative to other probable employment increases the likelihood of unemployment during cyclical downturns.

The analysis will include quarterly observations for the 1947-69 period, based on data compiled by the Bureau of Labor Statistics and on materials from the Department of Commerce and the Council of Economic Advisers used in the initial study.

Estimated Completion Date: December 1970

1.5.24 NORTHWESTERN UNIVERSITY
EVANSTON, ILL.

GRANT NO. 91-15-70-07

Principal Staff: Dr. Frank Brechling, Department of Economics

Project Title: The Relationship Between Regional and Overall Unemployment

Objectives and Procedures: This study is seeking to determine how unemployment by State and labor market area behaves cyclically and secularly, especially in response to changes in overall economic activity, and how such variations in unemployment affect aggregate wage behavior.

Quarterly and annual employment and unemployment data for 49 States and 150 labor market areas are being collected from published sources. The aggregative, structural, and cyclical elements of regional unemployment data are being examined. Measures of dispersion and skewness of the distributions of regional unemployment are being computed and estimates of its influence on aggregate national wage behavior will be made.

Estimated Completion Date: August 1970

1.5.25 NORTHWESTERN UNIVERSITY
EVANSTON, ILL.

GRANT NO. 91–15–70–12

Principal Staff: Dr. George E. Delehanty, Department of Economics

Project Title: Labor Mobility and Income Change

Objectives and Procedures: This study is analyzing the relationship between geographic, industrial, and employer mobility and income for workers grouped by age, race, and sex. Using data on work and earnings in a 1-percent, employer-employee subsample of Social Security Administration records for 1959–63, the study is attempting to find out by how much, for whom, and through what processes income change is related to labor mobility.

Estimated Completion Date: September 1970

1.5.26 UNIVERSITY OF OREGON
EUGENE, OREG.

GRANT NO. 91–39–66–38

Principal Staff: Dr. Donald A. Watson, Bureau of Business and Economic Research

Project Title: An Input-Output Model for Use in Manpower Projections for a State

Objectives and Procedures: This project is designing a system for collecting and analyzing data for use in constructing income and product accounts for a State. An input-output flow model and a workable model for making short-term projections of population, labor force, and industrial employment are being developed, using Oregon as the example. Data on the rates of technological change in various industries are being used to project the size of occupational groups in order that plans for vocational education can be made. Existing analytical models and data, especially projections of industry growth made by the University's Bureau of Business and Economic Research and projections of population and labor force made by the Oregon State Board of Census, are being revised and integrated into the development of the model.

Estimated Completion Date: By June 1971

1.5.27 PURDUE RESEARCH FOUNDATION
LAFAYETTE, IND.

GRANT NO. 91–16–68–36

Principal Staff: Dr. William K. LeBold, Engineering Administration

Project Title: A Study of Professional Job Satisfaction Dimensions and Their Correlates

Objectives and Procedures: This study is identifying the dimensions of engineers' and scientists' job satisfaction and measuring the way they relate to individual work history, educational background, work environment, professional activities, productivity, and job rewards. The project is using data from two questionnaire surveys involving nearly 7,000 engineers and scientists: (1) A 1964 study of a national sample of practicing engineers; and (2) a 1965 survey of Purdue University graduates with degrees in engineering, mathematics, and the physical sciences.

Estimated Completion Date: By June 1971

1.5.28 UNIVERSITY OF ROCHESTER
ROCHESTER, N.Y.

GRANT NOS. 91–34–66–48
91–34–67–53

Principal Staff: Dr. Dean Harper, Department of Sociology

Project Title: The Relationship of Migrant Workers' Attitudes and Behavior to Their Work Environment

Objectives and Procedures: This project examines different elements in the attitudes and aspirations of migratory farmworkers and relates this to their work experiences and to the migrant camp environment. Data from questionnaires administered to 141 migrants and 16 taped interviews are being examined for recurring themes and issues in the lives of migrant farmworkers.

Estimated Completion Date: By June 1971

1.5.29 SAN DIEGO STATE COLLEGE
SAN DIEGO, CALIF.

GRANT NO. 91–05–68–32

Principal Staff: Dr. Oscar J. Kaplan, Department of Psychology

Project Title: A Critical Review of Current Programs for Training and Placement of Unemployed Middle-Aged and Older Workers in San Diego County, Calif.

Objectives and Procedures: This project is identifying deficiencies in programs for the employment of persons aged 45 and over in San Diego County and designing a program for increasing the hiring of these persons. Interviews are being conducted with key San Diego employers, employment service personnel, union officials, educators, and certain public officials. In addition, information is being gathered on older applicants currently seeking work through the San Diego office of the California Department of Employment and on past employment experiences of this age group.

Estimated Completion Date: By June 1971

1.5.30 STANFORD UNIVERSITY
STANFORD, CALIF.

GRANT NO. 91–05–70–44

Principal Staff: Dr. Melvin W. Reder, Institute of Public Policy Analysis

Project Title: A Pilot Study of Response to Job Offers as an Index of Labor Market Conditions

Objectives and Procedures: This study is testing the validity of expanding the base for calculating unemployment rates to include the dimension, "intensity of job-search activity." It is developing and experimenting with instruments to measure: (1) The intensity with which unemployed persons search for jobs, and (2) the success of individuals in locating employment relative to the intensity of their jobseeking.

The researcher is selecting samples of applicants at private firms and various types of placement agencies in the San Francisco Bay area; stratifying them by such characteristics as age, sex, and occupational category; and tabulating individual reactions to valid job vacancies reported to them by the researchers. A scale for classifying individuals by the degree of intensity with which they search for jobs is being constructed. Indicators being used to gage the intensity of an individual's jobseeking efforts are: (1) The time lapse between receiving and responding to a job vacancy notice; (2) the ratio of the jobseeker's minimum "asking wage" to the appropriate average for the area; (3) the length of the journey (in time or distance) the jobseeker will undertake to apply for a vacancy; (4) the ratio of number of job offers rejected to number received by the jobseeker; and (5) the ratio of number of applications filed to number of vacancy notices received by placement agencies. Data are being collected in followup interviews from the sample groups for an assessment of subsequent job success relative to individual characteristics and intensity of job search.

Estimated Completion Date: June 1971

1.5.31 UNIVERSITY OF UTAH
SALT LAKE CITY, UTAH

GRANT NO. 91–47–69–64

Principal Staff: Dr. Garth L. Mangum, Human Resources Institute

Project Title: Tracing the Development of a Statewide Automatic Data Processing Employment Security System

Objectives and Procedures: As a guide for instituting computerized systems to match men and jobs, this project is tracing the introduction by the Utah Department of Employment Security of an automatic data processing system to handle managerial, unemployment insurance, and placement functions on a statewide basis. Attention is being given to the plans made, difficulties encountered, solutions found, and problems still to be solved in this pilot project.

Interviews are being conducted with involved Federal and State officials and employees of the computer company. In addition, the applications of a sample of persons seeking jobs through the employment service are being followed through the system.

Estimated Completion Date: June 1971

1.5.32 UNIVERSITY OF UTAH
SALT LAKE CITY, UTAH

GRANT NO. 91-53-70-40

Principal Staff: Dr. Garth L. Mangum, Human Resources Institute

Project Title: The Role of Training Directors in Employing the Disadvantaged

Objectives and Procedures: This study is compiling information from American Society for Training and Development (ASTD) members—training directors from private industry and public agencies who have played central roles in the vocational rehabilitation of disadvantaged workers—for use in a discussion of expanding private employment for disadvantaged workers at the 1970 ASTD convention.

Questionnaires sent to ASTD members and to selected managers of other organizations who have hired and trained disadvantaged workers are eliciting data on the number and characteristics of disadvantaged and other employees; types of training provided; preparation of supervisors and other employees; changes in job descriptions and in recruitment, hiring, and training practices; and major problems confronted. The final project report will contain survey results, papers submitted by a panel of specialists in response to the results, and discussions at the convention.

Estimated Completion Date: August 1970

1.5.33 WAYNE STATE UNIVERSITY
DETROIT, MICH.

GRANT NO. 91-24-68-29

Principal Staff: Dr. Robert A. Mendelsohn, Department of Psychology

Project Title: The Personality and Attitudinal Characteristics of Career and Homemaking Oriented Women

Objectives and Procedures: This investigation of personality characteristics, conceptions of masculine and feminine roles, and bases of self-esteem is an attempt to explain why so few of the women who work have jobs commensurate with their capabilities. A sample of 1,500 women and 500 men who graduated from Wayne State University are being given a personality test and asked to answer a questionnaire concerning their marital status and work experience. The analysis is attempting to establish differences between those women who are actively engaged in careers and those who are predominantly or exclusively homemakers and between these two groups and the men.

Estimated Completion Date: By June 1971

1.5.34 UNIVERSITY OF WISCONSIN
MADISON, WIS.

GRANT NO. 91-53-68-33

Principal Staff: Dr. Jack Barbash, Department of Economics

Project Title: Labor Movement Participation in National Manpower Programs of Selected Countries of Western Europe: Implications for U.S. Government-Labor Relationships

Objectives and Procedures: This study considers the problem of how a democratic society actively involves an autonomous labor movement, with shortrun, sectional interests, in formulating and accomplishing longrun, nationally oriented manpower objectives. Inferences for U.S. policy are being drawn from an analysis of experience in the United Kingdom, West Germany, Austria, Sweden, Denmark, the Netherlands, and possibly Israel—all of which have developed well-established relationships between their labor movements and public manpower programs. Effects of these relationships are being assessed in terms of the special interests of the labor movement and of the relative success of public policies in each country. Interviews are being held in each country with union, management, and government administrators concerned with manpower policies. Union decisionmaking activities are being observed and operating documents examined.

Estimated Completion Date: By June 1971

1.5.35 YALE UNIVERSITY
NEW HAVEN, CONN.

GRANT NO. 91-07-69-48

Principal Staff: Dr. Robert S. Goldfarb, Department of Economics

Project Title: Absenteeism, Information and Recruitment in a Local Labor Market

Objectives and Procedures: This study seeks information on the policies and characteristics of a firm that affect its ability to attract and retain workers, with special attention to absenteeism as an indicator of job dissatisfaction and a major cause of turnover. A number of local labor recruitment issues are being examined, including: (1) What methods of information dissemination are most effective in enticing people to apply for employment; (2) how quit rates vary among workers, by skill level and seniority; and (3) how wage differentials among firms influence recruitment.

Data are being collected from a small sample of New Haven firms on quit rates, absenteeism, number of employment applications on file (these first variables classified by worker characteristics), recruitment and training expenditures, promotion and training policies, representative skill requirements, and location (whether accessible to concentrations of entry-level workers).

Estimated Completion Date: By June 1971

SECTION 2. PROJECTS COMPLETED, JULY 1, 1969–JUNE 30, 1970

This section summarizes the major findings of research projects completed during fiscal year 1970. Included are reports on research contracts, doctoral dissertation grants, and research project grants. These contracts and grants were awarded under the Manpower Development and Training Act, the Economic Opportunity Act, and the Social Security Act. Information on how to obtain project reports is given in section 3.

2.1 PROJECTS COMPLETED, JULY 1, 1969–JUNE 30, 1970—Research Contracts Under the MDTA

2.1.01 ASSOCIATION FOR THE HELP OF RETARDED CHILDREN
NEW YORK, N.Y.

CONTRACT NO. 81–31–21

Principal Staff: Dr. Jack Tobias, Ida Alpert, and Dr. Arnold Birenbaum, New York Chapter

Report Title: Survey of the Employment Status of Mentally Retarded Adults in New York City

Abstract: This survey involved a followup of a sample of approximately 400 persons who had completed special education classes for the retarded in New York City's public schools. School records were examined, home interviews were held with each subject, and psychological evaluations were made of a subsample of the group. The survey covered the full range of their labor market experience and also provided information on the socioeconomic characteristics of this population and its school experiences.

The survey provided evidence of the close relationship between poverty and retardation. More than half of the young people surveyed were from families receiving public welfare. Over 40 percent were members of families which had been involved in court actions, predominantly in criminal courts. A similar proportion were raised in families with one or both parents missing.

Serious problems were found in the schools' identification of the retarded. Over one-half of the members of the retarded school population in New York City, particularly minority youth, were not so identified until after their 10th birthday. Moreover, the proportion of New York City's school children who are enrolled in special classes for the retarded was far smaller than the likely incidence of retardation in the school population. The survey also suggested that a considerable number of children are erroneously placed in these special classes. Puerto Rican children, for example, were represented at about double their expected frequency—language difficulties rather than intellectual deficits probably accounting for many of these assignments.

The study pointed up gaps in training and rehabilitation services for the retarded. It was found that, after leaving their special school programs, most retarded young people—more than 60 percent—did not take advantage of the training, counseling, and placement services of the State Division of Vocational Rehabilitation. Particularly, many of the Negroes and Puerto Ricans who had never held a job since leaving school were not known to the rehabilitation agency.

The survey furnished new information concerning the employability and labor market problems of this population. Approximately 60 percent of the male respondents were engaged in competitive employment in a wide variety of occupations—the large majority, full time—at the time of the survey. While most of the retarded young men surveyed had jobs, the majority received wages of $1.50 per hour or less: only 11 percent were paid over $2.00 an hour. Since their potential for advancement to higher skill levels is minimal, many of the retarded appear to face the prospect of working permanently at a poverty-level income. This vulnerability is increased by the fact that they were found to be employed largely by small firms which are more subject to failure than large businesses. The study also revealed significant underutilization of the retarded; more than 25 percent of the young men in the sample were either seeking work unsuccessfully or were able to work but had given up the job search. Retarded women present a particularly serious employment problem. Less than 30 percent of the young women in the sample were engaged in competitive employment; only a few were in training or in sheltered workshops. Only one-fifth of the women surveyed were married.

2.1.02 UNIVERSITY OF CALIFORNIA, BERKELEY
BERKELEY, CALIF.

CONTRACT NO. 81-05-66-30

Principal Staff: Dr. Edward R. F. W. Crossman and Dr. Stephen Laner, assisted by Stanley H. Caplan, Tarald Kvalseth and Frederick Schneider, Department of Industrial Engineering and Operations Research

Report Title: The Impact of Technological Change on Manpower and Skill Demand: Case-Study Data and Policy Implications

Abstract: This research analyzed the impact of technological change on manpower and skill requirements for both direct and indirect labor. In 18 case studies, data were obtained concerning the application of digital computers or analog automatic controls, coupled with some form of automatic data storage and transmission, in six processes. The processes were: Check processing and account posting in commercial banking; annealing, galvanizing, and tinplating steel; an airline passenger reservation system; electricity generation (thermal); hydrocarbon cracking (oil refinery); and air liquefaction and separation (chemical industry). Reflecting current trends in production and service technology, the concentration was on partial automation rather than primary mechanization.

Using the method they had developed in a pilot study (see **3.1.11**), the researchers constructed skill profiles (the distribution by skill level of the man-hours required to produce a unit of product or service) for the new process and for the older process which it replaced. To avoid transient effects on labor requirements during the installation and phasing out stages, only processes in continuous operation for 2 or more years were studied, usually in "paired" firms because the new and the old processes were seldom found in the same firm except during a brief overlap period. A major innovation in this study was the extension of the skill profile method, which derives skill factor scores from job evaluation schemes used in most industries, to measuring requirements for indirect labor. For this purpose, the measures related only to those functions whose withdrawal would cause a "rapid decay in process performance" (maintenance and first-level supervision and planning and scheduling, but not technical and research and higher management).

Direct labor productivity increased in 72 percent of the cases studied and remained the same in 28 percent. Almost all increases were in the 25 percent to 275 percent range. Inclusion of indirect labor data brought total productivity gains down, especially in manufacturing processes with large engineering maintenance requirements, and in two cases caused a small net reduction. The study showed a displacement of labor from direct to indirect roles as technology was introduced.

In a majority of cases, technological change increased direct and decreased indirect skill requirements, resulting in a slight decrease in the average skill level required of the total process-related work force. Only in the service sector, where indirect labor demands are low, was there a marked increase in overall skill-level requirements. Decreases in man-hour requirements were greater for semiskilled labor than for unskilled labor, and there was almost no net change for skilled labor (operatives and craftsmen). The introduction of partially automated technology produced greater change in skill demand in those cases where no automation had already been established than in somewhat automated but still manned processes, but there were no major percentage changes in man-hour or skill-level demand.

New processes generally required a slightly better educated work force, but "the general nature of the process had more effect than the technological change itself."

Technological change was constrained by manpower supply considerations, not the reverse, the researchers argued. Promising new developments were being postponed because of long-term shortages of manpower able to operate and maintain systems based on analog and digital information storage, programed processing, and automatic control.

The researchers further concluded that: (1) Parts of the "structuralist" argument on unemployment were upheld by the study data; (2) the impact of technological change on the labor force does not warrant Government intervention with short-term training and retraining schemes; and (3) the Government should support longer range programs such as apprenticeship for entrants into selected direct labor situations in high production, advanced technology workplaces.

2.1.03 UNIVERSITY OF CALIFORNIA, BERKELEY
BERKELEY, CALIFORNIA

CONTRACT NO. 81-05-67-24

Principal Staff: Dr. Margaret S. Gordon and Dr. Margaret Thal-Larsen, Institute of Industrial Relations

Report Title: Employer Policies in a Changing Labor Market—The San Francisco Bay Area Employer Policy Survey

Abstract: This study—part of a broader program of labor market research in the San Francisco Bay area—is probably the first study of the full range of employer policies and practices in the light of postwar changes in technology and the decentralization and consolidation of industry. Data were obtained in interviews with a random sample of 309 establishments, representing all major industry divisions (including government), which had at least 100 employees each and together accounted for 20 percent of the area's employment.

Change was the order of the day. About 85 percent of the establishments had made at least one of the following changes between 1960 and 1966, and about half had made at least three such changes: Built a new plant; remodeled a plant; installed new equipment; modernized equipment; significantly changed operating procedures; eliminated inefficient working arrangements; or changed materials used in the production process. Some establishments that had been locally owned had also sold a controlling interest to a larger corporation with headquarters elsewhere as the only way of financing modernization. Moreover, among those establishments with less than 250 employees, branch or headquarters units were considerably more likely to experience technological change than were single-unit establishments. The trend toward industrial consolidation thus may have hastened the pace of technological change.

When technological change took the form of building or remodeling plant facilities, it often contributed to industrial decentralization. The location of new industrial establishments and the expansion of existing establishments outside the central city areas, rather than the movement of establishments out of these areas, were the primary causes of decentralization. It appeared to have been influenced somewhat less by labor factors than by such physical factors as the availability of land and access to the newer modes of transportation. If employment opportunities continue to expand more rapidly in the outer ring of the area, the researchers observed, opening doors to jobs for Negroes from the central city will become more difficult.

In plotting the nature and extent of adaptation to these changes, the study emphasizes trends that are significant for manpower policy.

There is a strong case, the researchers contend, for publishing labor market statistics for combinations of the currently defined standard metropolitan statistical areas (SMSA's) wherever the labor market cuts across several of them. Such statistics for the Bay area would, they argue, make it far more clear than separate data for the San Francisco-Oakland and San Jose SMSA's that the labor market has one of the most rapid growth rates in employment. Combined statistics might, they speculate, show that the Bay area is not the highest wage area in the Nation.

On the other hand, there is also need for data on geographic areas within SMSA's to shed light on the considerable intra-area variations in both the rate of expansion in various occupations and the wages for different types of workers. This diversity also suggests an urgent need for better communication between local offices of the employment service with respect to job openings and job applicants.

The employment service also needs to respond to other findings by increasing formal recruiting, serving more white-collar workers, coordinating all manpower programs, and establishing new ventures in the suburbs.

The trend toward industrial consolidation may have favorable implications for manpower programs to expand training and employment opportunitites for the disadvantaged in the private sector. The policies of large establishments were again found to be more formal and systematic than those of smaller ones but they were also more flexible and amenable to change. The larger establishments had also been more active in hiring workers from Government-sponsored training and work-experience programs. On the other hand, although larger companies were, as usual, most likely to conduct training, very little of the formal training was designed for new employees.

2.1.04 UNIVERSITY OF CALIFORNIA, LOS ANGELES

LOS ANGELES, CALIF.

CONTRACT NO. 81–04–36

Principal Staff: Dr. Paul Prasow and Fred Massarik, Institute of Industrial Relations

Report Title: A Longitudinal Study of Automated and Nonautomated Job Patterns in the Southern California Aerospace Industry

Abstract: This study examined the kinds of problems, particularly social and psychological, faced by workers in "automated jobs." Two series of interviews were conducted with a sample of employees in automated and nonautomated jobs in six of the largest firms in the aerospace industry. "Automated jobs" referred to those duties associated with numerical control machines (NC) and electronic data processing equipment (EDP); "nonautomated jobs" (Equ) were those where the same or similar work is performed but with conventional equipment or methods. The first series of 509 interviews was held in the summer and early fall of 1966. Approximately 18 months later 443 of these workers were again interviewed. A survey of personnel records verified and supplemented data obtained in the interviews, and supervisory and management personnel were interviewed.

Many employees stressed that automation did change the nature and content of jobs. In particular they noted less control over the equipment and work operations, more demands for alertness and attention, and a need for additional training. Although all groups saw their jobs as requiring more skill and responsibility at the time of the second interview, these increases seemed to have little connection with whether the job was automated. There appeared to be no widespread concern about the introduction or consequences of new technology. Rather, a large group preferred automated to nonautomated tasks. Sixty percent or more of the EDP's and NC's indicated they liked "very much" or "fairly well" tasks requiring automated equipment. Even in the Equ group, nearly half expressed such a preference.

Office automation was more likely than factory automation to have an extensive impact on the labor force —complete change in method of operation, job displacement, and development of new occupational categories. In the factory, the older technology continued to predominate.

Those in automated employment, especially the male EDP workers, were more likely to receive supplemental training than those in nonautomated jobs. More than 60 percent of the male EDP workers had received training during the period covered by this study. Only 13 percent of women in Equ employment had such training. Generally, female employees, whether or not in automated jobs, were satisfied to have on-the-job training only. Male respondents more typically asked for some combination of in-plant training and technical training outside the plant.

Both NC and EDP supervisors preferred work in and supervision of automated jobs by margins ranging from 50 to 70 percent.

The consensus among management personnel was that automation had upgraded the labor force, increased specialization, and required more education and training of employees. Most firms supported elaborate training programs for NC jobs; however, very few conducted courses for EDP jobs. Recruitment of personnel for automated jobs has been largely accomplished by transfers within the plant—highly skilled machinists and engineers have been selected to work on automated jobs, especially NC equipment. Some firms have simultaneously raised and lowered their standards in the hiring of new personnel. While firms hire the most qualified persons to work with the new technology, the greater use of automated equipment has made it possible to recruit persons with lower skills and upgrade them through training.

2.1.05 COLUMBIA UNIVERSITY

NEW YORK, N.Y.

CONTRACT NO. 81–34–67–25

NOTE—This item summarizes five separate studies completed under this continuing project (see **1.1.06**).

1. **Principal Staff:** Dr. Eli Ginzberg, Conservation of Human Resources Project

Report Title: Men, Money and Medicine

Abstract: This study, a collection of essays dealing with critical health occupations and their workers, delineates the ways in which American medicine is rooted in the larger fabric of our national life and indicates the changes that must be made before the health industry can be significantly restructured.

Among the conclusions of the study are:

a. Contrary to current beliefs, there is no shortage of physicians. Despite slow but steady increases in the number of medical schools, enrollments, and graduates, the number of general practitioners and home visits has declined. Further, the geographic distribution of physicians does not correspond to that of the population.

b. The physicians' shift toward specialization has been associated with improvement in the structure of medical care, including the growth of various types of clinics and other outpatient care.

c. The basic pattern for the delivery of health services seems to be changing—but slowly; the private practitioner (alone or in group practice) still continues to dominate the scene.

d. Despite some growth, group practice is still far from being an adequate system to meet the Nation's health needs. Modest efforts to bring more regional planning into the health service field have at best produced marginal progress.

e. The outlook, however, is for a system dominated by corporate entities—especially if laws are altered to permit physicians to incorporate and to use more leverage in getting hospitals and other corporate entities to organize medical resources on a broader basis than now possible.

f. An associated trend would be the increase of salaried physicians on government payrolls and in nonprofit organizations to permit the delivery of more and better services to hitherto neglected population groups, including the urban and rural poor. This would imply that a broad allied health team would work with a hospital-based full-time staff, and this team should include indigenous members of the population to be served.

g. In the final analysis, the ability of the health industry to broaden and deepen its services depends on the large and continuing expansion of allied health manpower. To sustain this trend should prove less difficult than formerly, now that the various levels of government have taken a more active role in financing the education and training of these professionals and technicians. Further, their salaries are becoming more competitive with those of workers in other industries, and this factor should help in attracting a growing number to the field.

h. American people tend to equate health with improved medical care, and they have paid relatively little attention to such matters as population increase, accident prevention, alcohol, drugs, and employment practices in health preservation and rehabilitation. Yet the evidence grows daily that significant gains in longevity, the reduction of morbidity, and the improvement in the quality of life may be more closely linked to these ancillary developments than to an increase in medical services, per se.

i. While health education and the dissemination of health information has been a recognized field for years, there is still a large gap between what people need to know for the protection of their health and the information they presently possess.

2. **Principal Staff:** Dr. Beatrice G. Reubens, Conservation of Human Resources Project

Report Title: The Hard-to-Employ: European Programs

Abstract: This study analyzed the nature and extent of residual unemployment under full employment in western European countries and examined the public programs which various governments have adopted to make the hard-to-employ productive. It considered the relevance for the United States of European policies and programs.

The researcher found that tight labor markets in several European countries, small disparities in regional, seasonal, and group unemployment rates, narrow margins between minimum and average social and economic levels, and well-developed social programs serve to minimize the proportion of the population which is hard-to-employ, especially because of functional illiteracy, poor motivation, or alienation. Over and above these preventive measures, the hard-to-employ also benefit from overall manpower programs. Sweden was found to have an exceptionally good integration of general manpower policy with specific programs for the hard-to-employ.

The elements of a comprehensive program for the hard-to-employ, which have some counterparts in the

United States, are: (1) Outreach, intake, and screening procedures; (2) guidance and counseling services; (3) psychotechnical testing and vocational assessment facilities; (4) work-experience centers; (5) vocational training courses; (6) special placement efforts; (7) preferential or reserved employment; (8) subsidized employment or self-employment; and (9) special job creation under ordinary and sheltered conditions. However, in the United States, these measures are not as well-coordinated or as fully developed as in Europe.

In some European countries, people who are currently working but would become hard-to-reemploy if they lost their jobs—often older workers—can benefit from measures to maintain continuity of employment through: (1) Restrictions on dismissals; (2) sharing the work; (3) sustaining the demand for the products of specific enterprises; and (4) retraining of employees within firms. For those who do face loss of work, the most urgent need is a satisfactory new job, preferably without an intervening period of unemployment. Among the policies which assist those about to be displaced are: (1) Advance warning of dismissals; (2) special placement efforts from the enterprise site; (3) wage supplements to encourage the acceptance of lower-paid jobs; (4) retraining courses; (5) mobility allowances; and (6) the creation of new jobs.

The hard-to-reemploy who fail to obtain new jobs may be considered candidates for enlarged or special financial benefits. Three types of public financial compensation have assumed increased importance in western Europe: (1) Improved unemployment insurance and unemployment assistance benefits have been voted in several European countries and have provided differential payments for some types of hard-to-reemploy. (2) The redundancy or severance payment, while not specifically directed toward the hard-to-reemploy, makes larger payments to older displaced workers than to younger more employable men. (3) The final type of compensation, a pre-pension payment, encourages retirement from work at an earlier age or on better terms than are stipulated by standard old-age pension systems.

3. **Principal Staff:** Dr. Thomas M. Stanback, Jr., and Richard V. Knight, Conservation of Human Resources Project

Report Title: The Metropolitan Economy: The Process of Employment Expansion

Abstract: This study analyzed metropolitan labor markets (standard metropolitan statistical areas and non-SMSA counties with cities of 25,000 or more) in the United States through the use of employment data (grouped into 32 industrial classifications) from the 1940, 1950, and 1960 censuses. Instead of following conventional procedures of netting out job increases and job decreases, the analysis separated the two processes in order to stress the specific forces that lead to expansion and contraction in each market. The key methodological advance was using analyses of size and structure to define a topology of metropolitan markets; i.e., nodal, manufacturing, government, health-education, resort, and mixed.

It was found that the industrial composition of metropolitan labor markets varied according to size and principal economic functions. In general, the proportion of employment in business services increased with size of place, whereas the proportion of employment in consumer services was largest in smaller metropolitan labor markets. The composition varied among types of places. For example, the Atlanta SMSA, a nodal (service center) place, had 22 percent of its employed work force in manufacturing and 64 percent in service-producing industries in 1960, whereas Detroit, a manufacturing center, had 41 percent in manufacturing and 45 percent in services.

It was found, also, that the composition of jobs added and jobs destroyed differed markedly among types and sizes of places. Among the faster growing nodal places, growth centered in the service sector in which the expansion of business services played a key role. Among the manufacturing places, which generally are slow growing, there was little growth in the service sector, indicating poor development of external economies which could spark further growth.

There was considerable variation in the growth processes. Among the older and larger cities of the East and Midwest, there was considerable restructuring as employment decreases occurred in some industrial classifications, while increases occurred in others. Among the rapidly growing medium-sized larger metropolises of the Southwest and West, such restructuring as occurred was due almost entirely to growth.

It is clear that regional service centers have played an important role in the growth process. As growth occurs in these places and in the regions which they serve, the broadening of markets and development of external economies permit an assumption of economic roles previously performed by older and larger places.

This "passing down of functions" thus requires a restructuring of the larger places as their economic roles are altered.

Clearly the variety of training, guidance, and placement needs require that responsibility must be delegated to the States or local areas. A single policy for all labor markets is inconsistent with the differing needs. Moreover, it appears that regional development may best be serviced by encouraging the growth of regional service centers which attract industry and encourage the development of supporting activities.

4. **Principal Staff:** Dr. Dale L. Hiestand, Conservation of Human Resources Project

Report Title: Career Changers: Professional and Graduate Students After Thirty-Five

Abstract: This study explored the efforts of middle-aged persons to shift or advance in their career fields by entering or reentering professional or graduate schools on a full-time or nearly full-time basis. Data were collected through interviews with university officials and questionnaires to middle-aged students.

University officials, it was found, generally tried to restrict the acceptance of older students, and many aspects of admissions procedures worked to the disadvantage of older applicants. Nevertheless, there were significant numbers of older students enrolled in the schools. Nearly 7 percent of all full-time or nearly full-time professional and graduate students were age 35 and over; about half of these students were men and half were women. In most schools of social work and library services, at least 20 percent of the students were older. Graduate programs in education, the humanities, social sciences, and business also had above-average proportions of older students.

Students returned to school for a wide variety of reasons, and there did not appear to be a "typical" older student. The large majority returned for such positive reasons as a high interest in a particular field or because they wanted to acquire newly developing skills in their field. Very few returned to school because of failure to realize frustrated earlier ambitions. Most of those who returned took advantage of a chance opportunity, such as the offer of a fellowship or a paid leave of absence.

Nearly all of the middle-aged students were enthusiastic despite some problems. Reorganizing and adequately financing their family lives often presented major difficulties, regardless of income levels, although the large majority received financial aid. Many of the older students faced serious problems in their studies when they first reentered, but their academic performance tended to be average or better than average. Most, however, anticipated little difficulty in reentering paid employment, because they were on a leave of absence or were preparing for an occupation with manpower shortages.

The finding that the processes of occupational choice often continue into old age suggested a need for guidance services for middle-aged men and women who may provide a large potential pool of manpower for shortage occupations. The researcher also concluded that the adequacy of university admissions procedures, however, for both older and younger students may be open to serious question. The researcher also concluded that questions such as these are likely to increase in importance in view of ongoing rapid changes in technology, job content, and role definition of middle-aged persons, together with general affluence.

5. **Principal Staff:** Alfred E. Eichner, Conservation of Human Resources Project

Report Title: State Development Agencies and Employment Expansion

Abstract: Against the background of theories of regional economic growth, this study examined the potentialities and limitations of State development commissions in their efforts to expand and promote economic development. The study identified and evaluated the effectiveness of two basically different approaches in this area—planning and promotional activities.

The researcher concluded that many State development commissions are ineffective, and that many of the measures used to stimulate industrial growth (such as tax-free bonds) have severe limitations. However, it was emphasized that the commissions can, under strong State leadership, achieve their purpose by functioning as the principal State planning agency for directing and encouraging economic and employment growth. Stressing the planning function would provide criteria for assessing the desirable levels and alternatives for State investments in highways, education, and other necessary State functions. The study pointed out that the existence of a strong State effort often serves as a catalyst to energize the private sector and thereby results in a greater overall effort.

Special attention was directed to the strong State efforts in South Carolina to use manpower training funds to accelerate industrial growth.

2.1.06 CORNELL UNIVERSITY
ITHACA, N.Y.

CONTRACT NO. 81-34-68-39

Principal Staff: Dr. David Rogers, Faith Kortheuer, and Roslyn Menzel, New York State School of Industrial and Labor Relations

Report Title: An Exploratory Study of Interorganizational Relations

Abstract: This pilot study of the capacity of city government to mount efficient and effective socioeconomic development programs was conducted in New York City, Philadelphia, and Cleveland. It was concerned with the types of administrative structures and strategies that work or do not work, why they work well or badly, how those that are ineffective can be changed, and how various characteristics of cities (size, economic base, interest group coalitions, and political party structure, for example) affect their capacity to consolidate and decentralize antipoverty programs.

Considering the differences in the cities' sizes, there were, of course, wide differences in the magnitude of their socioeconomic problems and the scale and diversity of programs to alleviate these problems. There was also a profound divergence in the extent to which a coalescence of interests had occurred in connection with antipoverty programs. Despite this diversity, success in reversing urban decay in all three cities was found to be contingent on formation or broadening of an urban coalition—big business, universities, foundations, city hall, ghetto-based and other civic groups, and some unions.

Based on the findings of this exploratory study, further research has been undertaken to develop a conceptual scheme and to recommend organizational techniques and arrangements that will improve the efficiency and effectiveness of manpower programs (see **1.1.27**).

2.1.07 U.S. TRAINING AND EMPLOYMENT SERVICE
U.S. DEPARTMENT OF LABOR
WASHINGTON, D.C.

CONTRACT NO. 81-53-67-04

Principal Staff: William R. Fischer, Wisconsin State Employment Service

Report Title: Project Vision, An Experiment with Occupational Needs Projection Techniques

Abstract: The objective of this study was to develop a system for collecting, analyzing, and disseminating occupational and employment information to improve vocational education and training. Five methods of projecting occupational demand were tested to assess their effectiveness for use by educators and manpower agencies.

The key method tested was the Experimental Employer Needs Survey (a modification of the USTES Area Skill Survey), which was based on a sample survey of employers in the Milwaukee standard metropolitan statistical area who were asked to forecast their employee requirements for the subsequent 3 and 5 years by specific occupation. The Leading Indicators Experiment used the Area Skill Survey returns to identify, for followup interviews, firms whose occupational mix and projected employment trend might provide information useful for vocational education planning. The Industry-Expert approach secured information on technological and occupational trends from interviews with a broadly representative group of businessmen such as company presidents, plant managers, and training directors. This approach was attempted with the printing and publishing industry and the metalcasting industry. A fourth method, the Unfilled Openings-Occupational Outlook Handbook approach, relied primarily on hard-to-fill job orders registered with the local public employment office and published data on national occupational trends. The last method tested, Occupation-by-Industry Matrix, dealt with the application of the Bureau of Labor Statistics' national projections of employment by industry and occupation (see **3.1.64**) to local area industry statistics.

It was found that the Experimental Employer Needs Survey technique provided needed current employment statistics and short-term (1- or 2-year) projections, but it was less reliable in projecting employers' occupational requirements on forecast periods of 3 and 5 years.

The other techniques tested did not appear to offer a solution to the need for comprehensive quantitative occupational projections. However, the Industry-Expert approach provided excellent qualitative judgments about the need for graduates of specialized occupational training courses, in an industry such as the metalcasting industry which has a fairly uniform occupational structure. The Unfilled Openings-Occupational Outlook Handbook technique was useful in identifying hard-to-fill jobs for a limited number of occupations. The Occupation-by-Industry Matrix technique can best be applied at the State level or in the largest standard metropolitan statistical areas.

To best serve the occupational information needs of the vocational education system, the authors recommended a simplified Employer Needs Survey taken at frequent intervals with a shortened forecast period.

An exploration of sources of data on the supply of workers expected to be available for specific occupations (new entrants and experienced workers) revealed a need for organized and systematic data collection from local and private training institutions. The author recommended further study of factors affecting the movement into and out of the labor force, turnover, in-plant transfers, and in- and out-migration.

In addition to the need for an expanded and improved data base, the researcher found need for improving communication between the employment service and the vocational education system. The project helped to devise an occupational cluster guide which classifies groups of occupations in relation to instructional programs.

2.1.08 UNIVERSITY OF FLORIDA
GAINESVILLE, FLA.

CONTRACT NO. 81-10-68-34

Principal Staff: J. Kamal Dow, Department of Agricultural Economics

Report Title: Historical Perspective of the Florida Citrus Industry and the Impact of Mechanical Harvesting on the Demand for Labor

Abstract: This study of the Florida citrus industry compares the economic efficiency of mechanical harvesting systems with that of the manual system and explores the impact that adoption of mechanical harvesting systems would have on the demand for labor.

The economic efficiency of each system was computed at specific levels of citrus prices, wage rates, and yield, adjusted to exclude the proportion that must be hand-harvested for fresh use. At 1969 wage levels and 1967–68 fruit prices only one mechanical system is more profitable than the manual system. However, assuming the present upward trend in wage rates continues, the expected increase in crop size would expand labor requirements and lower citrus prices to a point where it would become economically advantageous to convert to mechanical harvesting systems. However, it is expected that only 10 percent of the industry will be mechanized by the 1975–76 season because growers are reluctant to adopt new methods and can still recruit workers fairly easily. Mechanization should proceed faster after 1975 and by 1980 should range from 20 to 30 percent of the grapefruit and 50 to 60 percent of the early and midseason oranges.

Because of the expected slow spread of mechanization, it would not completely offset the rise in labor requirements for crop expansion. Under the assumptions of the study, employment would rise from about 25,000 in 1969–70 to over 28,000 in 1975–76, a 12-percent increase to harvest a crop 30 percent larger. By the 1980–81 season, crops are expected to be over 50 percent larger than in 1969–70 with the peak labor requirements 13 percent higher.

The most important impact will be on the skill structure of the labor force. It is expected that between now and 1980, if feasible steps are taken to smooth seasonality, the peak demands for relatively less skilled workers will be reduced by about 3,000, or 15 percent, while those for skilled and semiskilled workers will almost double, raising their numbers by about 2,400.

If efforts are begun now to upgrade the skills of workers to match those required by the industry in the future, few workers should be displaced. For those who can acquire the necessary skills, year-round jobs could be provided by coupling the operation of the harvesting equipment during the season with off-season work in repair and maintenance of machinery and conditioning trees for mechanical harvesting. For those who cannot adapt, however, greater efforts to find off-season employment appear to be necessary.

2.1.09 GREENLEIGH ASSOCIATES, INC.
NEW YORK, N.Y.

CONTRACT NO. 81–34–68–27

Principal Staff: Dr. Hazel McCalley and Dr. Clara Friedman

Report Title: A Study to Develop a Model for Employment Services for the Handicapped

Abstract: This study developed a model for the delivery of employment-related services to the handicapped. The analysis used data on: The number of potential candidates for services; the characteristics and needs of this population; the adequacy of current services to the disabled and the necessary and feasible adjustments; patterns in the delivery of services in the local community; and the reorganization and linkages between agencies needed for an optimum system.

The number of likely candidates for assumption into the labor force is difficult to ascertain with precision. However, the study identified a *minimum* of 1.2 million of the handicapped unemployed as men not in the labor force—with an additional 1 million who, although employed, are severely handicapped. Those in need of the most help were listed as individuals with mental problems, severe handicaps, or handicaps found unacceptable by employers and the disadvantaged.

The primary finding of the study was that there really is no *system* for services to the handicapped particularly in relation to employment. The agencies which are able to provide services know of and help only a small proportion of those who need assistance. Outreach is inadequate. Often many years elapse between the onset of a disability and proper employment assistance because communication between various agencies is poor or nonexistent. When services are finally provided, the client is frequently subjected to a series of referrals from one agency to another. Although resources allocated to improve the employment situation of the handicapped are generally insufficient, Federal manpower programs are too often not used to supplement these efforts. Lacking the wherewithal to cope with the total problem, agencies tend to take only the cream of the group of potential candidates in order to produce the most impressive results.

The study described as overwhelming the need for adequate job training. Building around this core need, the study developed a model (tested in Tacoma, Wash., and Baltimore, Md.) for delivering employment services to the handicapped. The model calls for a comprehensive umbrella system for the coordination and delivery of services. Outreach is decentralized and expanded. Intake is inclusive, not exclusive. Emphasis is put on early identification of needed services, especially for those who constitute the primary target population. Once accepted, the clients receive diagnostic evaluation and are provided with medical and health services, counseling, and other auxiliary services whenever necessary. Education, training, and work evaluation are followed by intensive job analysis and job development. Incipient and current labor shortages are identified and analyzed as potential employment opportunities for the handicapped. Where necessary, the restructuring of qualifications or jobs themselves is sought to make the positions not only available but also suitable for the handicapped. Job development in the public sector, particularly with State and local governments, is a major effort.

2.1.10 HARVARD UNIVERSITY
CAMBRIDGE, MASS.

CONTRACT NO. 81–23–66–22

Principal Staff: Dr. Peter B. Doeringer and Dr. Michael Piore, Department of Economics

Report Title: Internal Labor Markets and Manpower Analysis

Abstract: This study developed the concept of the internal labor market, through observing its operation in manufacturing firms, and applied it to the analysis of four current manpower problems: (1) Manpower adjustment and labor market imbalances; (2) technological change and adjustments in job content; (3) employment discrimination; and (4) low-income employment and the disadvantaged labor force.

The researchers defined the internal labor market as an administrative unit such as a manufacturing plant, within which decisions on employment, wage determination, and training of labor are governed by a set of fairly rigid administrative rules rather than by economic variables as in the external labor market. They postulated that specificity of skills and training, the process of on-the-job training, and work customs generate internal labor markets. They speculated that such markets cover 80 percent of all workers, the remainder being self-employed or in casual farm and service jobs.

Most internal labor markets can achieve a viable balance with the external labor market through a series of adjustment instruments which operate primarily upon the characteristics of the labor supply and over which management can exercise considerable discretion, the researchers found. These instruments are hiring standards, screening procedures, training, recruitment procedures, subcontracting, job vacancies, and overtime. Management elects to use these instruments roughly in accordance with their relative costs and benefits. Other instruments—the compensation structure, the job structure, and the structure of the internal allocation of labor—are often the focus of custom at the workplace and a part of decision processes largely unrelated to the resolution of labor market imbalances. Internal labor markets can provide a more efficient form of market organization than can competitive labor markets whenever fixed labor costs and economies of recruitment, screening, and training are present, the researchers concluded. However, they pointed out that the economic efficiency of the internal labor market may be reduced by rules which enhance job security and equitable treatment of the internal labor force.

With respect to technological innovation, procedures for selecting productive techniques were found unresponsive to relative scarcities of different types of labor but consistent with cost minimization. Thus, if major structural bottlenecks widen cost differentials between various types of labor, enterprises would be induced to seek out techniques which substitute surplus labor for the kinds of labor in short supply. These findings imply that the pressure of costs arising from the adjustment process, rather than unemployment, is likely to be the more serious aggregate labor market problem and that public policies should encourage firms to adjust to tightening labor markets through nonwage adjustments.

Discrimination appeared to be effected primarily through hiring standards, screening procedures, recruitment procedures, internal allocative rules, and the rules governing wage determination. Again, the researchers pointed out that costs of remedies need to be taken into account. The formalization of recruitment and hiring procedures was thought likely to curtail the ability of the internal market to adapt efficiently to technological change and changing labor market conditions, and the statistical nature of the screening process would make it difficult to admit more qualified members of a given group without admitting more unqualified members of that group at the same time.

The disadvantaged labor force, particularly those from racial minorities, tend to find work not in the stable internal labor markets of the medium- and large-size enterprises whose operation was the focus of this study, but in a low-income, secondary labor market, the researchers believed. In this secondary labor market, employers either need only a casual labor force or tolerate high turnover and absenteeism because their cost is less than that of their cure. Hence, the researchers reasoned, discrimination, the quality of work available to the disadvantaged, and the style of life in low-income neighborhoods may be more important causes of labor market disadvantage than inadequate education and skill. If this is so, they concluded, policies to improve the lot of the disadvantaged must encompass a broad range of measures not normally thought of as part of manpower policy.

2.1.11 HARVARD UNIVERSITY
CAMBRIDGE, MASS.

CONTRACT NO. 81-23-67-23

Principal Staff: Dr. James G. Scoville, Department of Economics

Report Title: Concepts and Measurements for Manpower and Occupational Analysis

Abstract: This study explored the conceptual bases and uses of various manpower and occupational classification systems, developed an economic theory of the determination of the content and relationships of jobs within and between employing units, and investigated alternative sources of improved manpower data. The study was based on a review of the literature and an informal survey of the uses of various kinds of occupational data for research and operating purposes by academic institutions, companies, unions, and government.

The report describes the development and characteristics of the major current occupational classification systems—the *Dictionary of Occupational Titles* (DOT) prepared by the U.S. Training and Employment Service (USTES), the census classifications, and International Standard Classification of Occupations (ISCO). These systems generally were found to be lacking in detail and frequency of observation. The researcher found a need for detailed annual data on the characteristics of specific kinds of jobs, their technological and social contexts and their associated educational, training, and income characteristics. Three proposals to overcome major shortcomings of the more frequently used systems are described as well as the attempt by the Bureau of the Budget to develop a convertibility list that could serve as a means of conversion from one classification system to another.

The theory of the determination of the content of jobs and the relationships among them considered the rationale for employers' choice among the various combinations of specific jobs which will suffice to perform the work and the preferences of workers and their organizations regarding this choice. These considerations were related to each other through cost-benefit analysis. Several illustrations of the application of the resulting model explored the relationship between job content and training, mobility, and occupational choice.

The author summarized recent efforts to improve occupational information and compared the potential usefulness of occupational data collected from employers with that obtained from workers by means of household surveys. He concluded that the latter would be the best source because employers probably cannot provide accurate occupational data, and social and economic information needed for analysis of the occupational data can be obtained only from workers.

2.1.12 UNIVERSITY OF HOUSTON
HOUSTON, TEX., in cooperation with

TEXAS SOUTHERN UNIVERSITY
HOUSTON, TEX.

CONTRACT NO. 81-46-68-02

Principal Staff: Dr. Joseph E. Champagne, Center for Human Resources, University of Houston, and Dr. Robert L. Prater, School of Industries, Texas Southern University

Report Title: Teenage Employment: A Study of Low Income Youth in Houston, Texas

Abstract: This study of teenage employment in the Houston metropolitan area sought reasons for the disproportionately high rate of Negro teenage unemployment. A group of 256 Negro and white teenagers of low socioeconomic level, primarily 18–19 years of age, were interviewed in 1967 and 1968, approximately 1 year after they graduated from or dropped out of high school. (Efforts to get a random, representative sample failed.) Information was collected on their personal characteristics, family background, work history, educational background, and work attitudes and aspirations. Employers in the Houston area were contacted (13 by interview; 107 by questionnaire) to obtain their views on and experiences with hiring teenagers.

The youth's employment situation generally paralleled that found in other studies, with all differentials favoring the white over the Negro, the man over the woman, and the graduate over the dropout (although white dropouts fared better than Negro graduates). Whites were also more likely to have had vocational training in high school and post-high school training. Similarly, Negro youth generally knew less than white youth about the world of work—including job requirements, personnel requirements, and employment applications—and were less likely to have received such information or help in finding a job from a school counselor or other knowledgeable person.

Although most teenagers of both races felt employers did not discriminate by race, Negro teenagers had less favorable opinions of Houston employers. Employment of teenagers in the firms sampled, mostly large manufacturing companies, was minimal. Most jobs into which teenagers were placed did not require any specific skills. When they did, on-the-job training was given. Previous work experience seemed to be more important to employers than vocational training or, in many cases, a high school diploma, which was not required by over half the companies surveyed. While employers rated young Negro employees as good as young whites, the rejection rate was much greater for Negro than for white applicants, suggesting that employers hired only the cream of Negro youth. The major reason given by employers for the high rate of Negro teenage unemployment was poor education, followed by poor attitude, cultural differences, and—last—discrimination. The researchers made a number of recommendations to ameliorate the conditions they

found. They also recommended study of Mexican American youth and broader studies of teenage employment.

2.1.13 THE UNIVERSITY OF KENTUCKY RESEARCH FOUNDATION
LEXINGTON, KY.

CONTRACT NO. 81-19-68-17

Principal Staff: Dr. Niles M. Hansen, Department of Economics

Report Title: Urban and Regional Dimensions of Manpower Policy

Abstract: This study examined current regional development policies, programs, and alternatives with specific reference to human resource development and worker mobility.

Development programs, the researcher found, have emphasized efforts to improve physical facilities in outlying rural areas in the hope of inducing economic activity and growth, without commensurate effort to improve human resources. More recently, funds have been allocated to attract industry to central-city areas in large metropolitan centers already plagued by many serious problems.

The researcher concluded that the most efficient way to provide jobs for residents of distressed regions would be to develop, as growth centers, intermediate-sized cities that have already demonstrated strong economic and employment growth and show potential for future growth. These growth centers would not only provide employment for residents, but would also help reduce the influx of ill-prepared migrants to large metropolitan centers which have difficulties in absorbing them. Mobility benefiting both the worker and the receiving area is now considerably restricted because many rural workers do not possess the skills or training for urban employment.

The study indicated that an essential feature of manpower policy should be to link the problems of lagging areas to opportunities in growth centers by aiding the further development of such centers on the condition that the centers employ a significant number of unemployed or underemployed persons from lagging areas. An accompanying investment in human resources and expansion of manpower programs in lagging areas, including location programs with comprehensive supportive services, are also desirable and economically rational from a national point of view. Conditions and prospects are evaluated for seven areas or groups of areas with relatively lagging economic conditions, including the Appalachian region, Indian reservations, and areas of the Southwest with large concentrations of Mexican Americans (particularly south Texas).

2.1.14 MICHIGAN STATE UNIVERSITY
EAST LANSING, MICH.

CONTRACT NO. MDTA 9-63

Principal Staff: Dr. Einar Hardin and Dr. Michael E. Borus, School of Labor and Industrial Relations

Report Title: Economic Benefits and Cost of Retraining Courses in Michigan

Abstract: This study examined the primary effects of training on gross national product, the disposable income of trainees, and the expenditures and receipts of government and analyzed variations associated with trainee, course, and labor market characteristics. The authors surveyed samples of trainees who entered 40 MDTA or ARA institutional training courses in Michigan between 1962 and 1964 and control groups of persons with similar background who did not enter training. Other information was obtained from government records and training project records.

The authors found that institutional retraining courses were sound investments for the economy and for the trainee. The benefit-cost ratio was estimated to be 1.21 for society, assuming the benefits of the first year after training continued for 10 years and using a discount rate of 10 percent. Benefits were measured by the gain in annual earnings and costs by the sum of earnings lost during training, trainees' expenses, and the cost of instruction and administration. Short courses, those of 60 to 200 hours, had a considerably higher ratio—17.34, and the ratio was slightly negative for courses lasting over 200 hours.

Similarly, there were significant benefits for trainees, particularly those in short courses, who were estimated to receive an average of nearly $900 in added income in the year after training, for an investment of

$180. The private benefits were measured by the net increase in the sum of trainees' annual after-tax earnings, unemployment benefits, and welfare payments following the course. Private costs reflected the net decrease in the sum of these three sources of income, training allowances, and training-related expenses. Gains in earnings after training were smaller among trainees with more years of schooling. With few exceptions, the medium and long classes reduced the economic welfare of the trainees; the adverse effects of these classes for minority members were accentuated by noticeably reduced welfare payments after training.

Short courses were found to be of much greater value to the government than longer ones, taking into account annual savings in welfare payments, unemployment insurance benefits, as well as increased tax receipts, minus the cost of training allowances, instruction, and administration. These calculations used discount rates of 4 and 8 percent; at 4 percent, the overall benefit-cost ratio was only 0.64.

The social and individual benefit-cost ratios were above average among women, minorities, enrollees who had low earnings in the year before training, and enrollees who had not received unemployment insurance benefits in that year. Short training courses for health care and miscellaneous sales and service occupations also yielded above-average benefit-cost ratios.

Mindful that their research pertained to a period of relatively high unemployment when much training was geared to workers displaced by technological change, the researchers called for longitudinal studies to see if current training shows higher benefits for shorter training and to examine the reasons for this relationship. Other variables that still need examination are the probability of job-finding success and the probability of remaining on the job after training. In addition, the researchers recommended launching recurrent sample surveys of persons who enter training classes and of associated control group members.

2.1.15 THE UNIVERSITY OF MICHIGAN
ANN ARBOR, MICH.

CONTRACT NO. MDTA 17–63

Principal Staff: Dr. Gerald Gurin, Survey Research Center

Report Title: A National Attitude Survey of Trainees in MDTA Institutional Programs

Abstract: This nationwide study of attitudes and motivations surveyed 6,000 persons enrolled in MDTA institutional training programs through questionnaires and a subsample of 300 trainees through personal interviews. The study also sought to determine how attitudes and motivations related to enrollees' decisions to complete or leave the program as well as their employment experience in the postprogram world. Information was sought at enrollment, on completion (or dropping out) of the program, and 6 months or more after completion.

Most trainees praised the quality of the training program, felt that the experience was useful, and felt that it had an important impact on their lives. Even dropouts, whose early termination was caused mainly by economic pressures, were generally favorable to the program. On the negative side, trainees would have preferred more practical experience in the program and had some apprehension about their readiness to handle posttraining jobs. This finding, the researcher concluded, underscores the importance of both closely approximating actual job conditions in the training situation and assisting trainees in making the transition to the job.

The key finding on attitudes and motivations was that trainees by and large accepted the norms and values underlying typical working patterns in our society. Motivational problems centered upon effectiveness and powerlessness rather than aspirations and values. Thus, the trainee's feelings of efficacy and his confidence that he could plan and control his future predicted his chances of ending up in a training-related job as well as his unemployment and wage rate outlook. This result, in the researcher's opinion, argues persuasively for programs that stress real work situations and the development of skills and competence over those that emphasize preplacement "preparation" or socialization.

Regarding the impact of training itself, there was some evidence that the gains were somewhat greater for women than for men. The relatively greater wage gains of women trainees, however, appeared to be a function of their less favorable employment histories and pretraining skill levels.

After the program, black men and women had more unemployment than whites but had about the same wage rates. Despite the difference in posttraining job histories, black and white trainees were equally favorable in their reactions to their training experience.

The findings and interpretations of the study must be evaluated in light of the changes in both the MDTA program and the state of the economy that have occurred since the 1964–65 survey period.

2.1.16 THE UNIVERSITY OF MICHIGAN ANN ARBOR, MICH.

CONTRACT NO. 81–24–68–26

Principal Staff: Dr. Kent H. Marquis and Dr. Charles F. Cannell, Survey Research Center

Report Title: A Study of Interviewer-Respondent Interaction in the Urban Employment Survey

Abstract: To improve the accuracy and validity of data collected by personal interview, this study investigated the kinds and amounts of verbal behavior that occurred during household survey interviews (using a special version of the 1968 Urban Employment Survey Questionnaire) and the effects of the respondents' age and race on this behavior. Four white, middle-class women who were trained especially for the study conducted tape-recorded interviews with four sample groups of employed men in Detroit (Negroes and whites, age groups 18 to 34 and 35 to 64). Every item of verbal behavior of respondents and interviewers was coded for analysis, using a simple system of 36 codes (13 for interviewers and 23 for respondents) developed for the study.

The average respondent was asked approximately 100 questions. On the average, about 500 verbal acts were coded for each of the 181 interviews—about 2½ times the number required merely to ask and answer the questions. Even correctly asked questions which elicited adequate answers generated nearly five verbal acts each.

Surprisingly, only 44 percent of the behaviors came from respondents. About two-thirds of their behaviors were answers to questions and probes. There was a moderate amount of elaboration of answers and a very low level of irrelevant behaviors. Among the interviewers only three-fifths of their behaviors fell into the question asking and probing categories, on which their training focused. One-fourth of their behaviors were coded as feedback, which they often used improperly, showing approval of inappropriate respondent behavior at least as often as reinforcing adequate responses.

Interviews with older respondents contained significantly more interaction per question than did interviews with younger respondents, but there was no significant difference between Negroes and whites within each of the two age groups. Interviews with younger respondents contained higher proportions of correct questions, adequate answers, and asking and receiving clarification, whereas those with older respondents contained higher proportions of elaborations, answers to incorrect questions, and repeated answers. Interviewers used proportionately more probes for Negroes than for white respondents and Negroes gave more inadequate answers than did whites.

A trial use of the data to identify and diagnose problems associated with specific questions centered on the codes for questions that were often incorrectly asked, omitted, or answered inadequately and those that required a large number of behaviors to obtain adequate answers. The researchers concluded that the analytical approach could be refined and expanded to pinpoint problems with each question and the most likely causes of the problems. Hence, the techniques could be used to evaluate pretest questionnaires for different population groups, the training of interviewers, and interviewing techniques.

2.1.17 ROBERT R. NATHAN ASSOCIATES, INC. WASHINGTON, D.C.

CONTRACT NO. 81–09–68–01

Principal Staff: Edward D. Hollander

Report Title: Transferability of Military-Trained Medical Personnel to the Civilian Sector

Abstract: This research analyzed the flow of enlisted personnel from military medical departments to the civilian sector. A major phase of the study was a survey of 1,238 enlisted men (Army, Navy, and Air Force) with military medical assignments, who were interviewed in late 1968 and early 1969. They were equally divided between men scheduled for release in

1968 or 1969 and those released in 1965 or 1966 and between career men who had served at least 18 years and were turning 40 and drafted and enlisted men who had served one term of 2 to 4 years and were in their early 20's when separated.

Assuming that 30,000 medically trained men will be released by the military in 1971, it was estimated that from 600 to 800 career men and 8,000 to 13,000 noncareer men who are interested in the civilian medical/health field would be lost to the civilian sector because they would be unable to find acceptable positions. Among the men still in service at the time of the survey, three-fifths of the career men and half of the noncareer men expected to work or study full time in the medical/health field as civilians. Of the men who had been separated 2 to 3 years earlier, however, only about two-fifths of the career group and one-fifth of the noncareer group were actually engaged in medical or health activities when they were interviewed.

Men planning to enter the civilian medical/health field tended to think primarily of hospitals as places of employment, but among those who had actually transferred only half of the career group and a third of the noncareer group found jobs in hospitals. The only other noteworthy concentration of employment was found in private laboratories, which accounted for one-seventh of the career men and one-fourth of the noncareer men.

In the men's opinions on obstacles to finding civilian medical/health jobs, neither the female image of allied health workers nor dislike for a female supervisor seemed important. Conditions of employment, other than pay, were also mentioned infrequently. The greatest emphasis was put on pay levels and such civilian hiring standards as educational requirements and lack of acceptance of military training and experience, which convinced many men that they would be ineligible for jobs at a level commensurate with their abilities.

With significant exceptions, men working in the medical/health field had higher median annual earnings than men working in other jobs. The exceptions occurred where a higher proportion of the men in the group were engaged in direct patient care and employed in hospitals and thus were receiving the low pay scales typical of nursing positions and hospital work.

Some of the career men, the researchers believed, might be in a position to weigh heavily the nonmonetary satisfactions in allied health work, because of their retirement pay and benefits. For noncareer men, however, it will take not only satisfactory earnings but easier entry to suitable jobs and good prospects for advancement to entice more of them into the health service industry.

An important first step in a program to increase the supply of military men into civilian health activities, in the researchers' opinion, is joint study by military and civilian authorities of their respective medical systems in order to synchronize or establish equivalents between military training and civilian educational curriculums and between military job functions and civilian job duties. Several other recommendations deal with such matters as records and accreditation of the veteran's training and experience, modification of civilian (including Federal agencies') hiring standards, restructuring civilian health occupations, and an improved transition program.

2.1.18 NATIONAL MANPOWER POLICY TASK FORCE
WASHINGTON, D.C.

CONTRACT NO. 81-09-66-31

NOTE—This item summarizes two separate studies completed under this continuing project (see **1.1.24**).

1. **Principal Staff:** Varden Fuller

Report Title: Rural Worker Adjustment To Urban Life, An Assessment of the Research

Abstract: This study reviewed and assessed research on the rural to urban movement in the United States, focusing on the adjustment of the rural labor force to an urban setting, and suggested a framework for future research.

The author summarized the background for research in Department of Agriculture statistics: Since 1940, farm population has fallen by almost two-thirds; farm employment and the number of farms have decreased by one-half; and net farm production is approaching an increase of three-fourths.

Studies of the impersonal forces underlying this massive exodus have "only embellished and elaborated" the conclusion of the 1945 study by Professor

T. W. Schultz: "Not prices . . . but the existence of job opportunities—the opportunity to migrate—takes people off farms or requires them to stay put." The research has, however, challenged the hitherto almost universal assumption that if enough labor would leave agriculture, the incomes of those remaining would improve relative to nonfarm incomes. It has also raised a still unanswered question: Why has off-farm mobility so often merely transferred the low-income problems from agriculture to another setting?

The answer has been sought through analyses of the attributes of those who move and the influences upon their decisions. Although most of the migrants have been poor people from low-income areas, no research has attributed their condition to inferior personal capacity. At the same time, while the migrants have been predominantly younger and better educated than those remaining in the rural area, the studies do not show that migration has selected the more intelligent and capable. Little attention has been paid to how assimilation might be affected by such factors as being educated in a rural school, migrating at an older age or with less education, being poor, and lacking good labor market information.

Much of the research on how the migrant actually makes out in urban life has dealt with such small fragments of the measures of assimilation (occupation and employment, for example) or of the migrant population (part-time farmers, farm wage laborers, or migrants of Mexican American lineage, for example) that few generalizations can be made from the findings. The results of research have differed widely by group and by area. Migrants experiencing the greatest difficulty in assimilation appear to have been the Southern white, the American Indian, and the migratory farmworker.

One of the primary lessons resulting from this research is that rural birth or rural rearing has no more than an inconsequential, ephemeral influence upon human behavior in assimilation. In the author's opinion, this, plus the fact that the United States is now an urban society, argues for abandoning the perspective of rural versus urban in future research on manpower adjustments.

Furthermore, he reasoned that rural-urban migration is not a self-contained phenomenon; it is attributable to the unevenness of economic development among industries and areas. In addition, the concepts of migration and mobility have not added much to the understanding of the adjustments demanded by technological change and economic growth. Hence, future research should focus not on migration but on the environment of rural-urban adjustment—the nature and urgency of the demands and the preparedness of individuals to meet them.

Given this reorientation, the author believed that research on rural-urban adjustment should attempt to learn from experience with government programs, especially experimental and demonstration projects in worker relocation under the Manpower Development and Training Act. Beyond this, he pointed to the many research possibilities already suggested by the President's National Advisory Commission on Rural Poverty and a 1968 conference at Oklahoma State University on the rural to urban population shift. (See **3.3.86.**) Still other research possibilities stem from studies of urban and ghetto problems, relief and income maintenance problems, and civil disorders.

2. **Principal Staff:** Dale L. Hiestand

Report Title: Discrimination in Employment, An Appraisal of the Research

Abstract: This report assesses research on discrimination in employment by the criterion of its possible contribution to the elimination of discrimination, which is viewed as an economic waste and a social and moral evil. It delineates very briefly the principal findings of leading studies in the major fields of inquiry to identify gaps and to indicate priorities in future research.

Nearly all of the research bespeaks difficulties in defining discrimination, much less identifying it. These problems reflect the impossibility of pinpointing "where differences based on inherent . . . qualities shade into those based on social values . . . and where the latter shade into discrimination because of the way in which social institutions or processes operate, and where this in turn shades into overt discrimination in the labor market."

In the "extraordinary" amount of research on differential patterns of employment between majority and minority groups, the author found, many analysts have seemed to assume that exposing these differentials will call forth public and private action to eradicate them. Even the much smaller number of studies addressed to the question of the extent to which differentials represent various types of discrimination have provided no measures of discrimination, but they did suggest the complexity of the efforts required to reduce differentials.

The growing body of research on the extent to which discrimination may result from equal application of institutional procedures has thus far produced mostly fragmentary or preliminary results. Nevertheless, much of it points to either the need for definitive work or a new tack in studying such crucial determinants of employment patterns as testing procedures, employer recruiting systems, information sources of jobseekers, the availability of housing convenient to places of employment, promotion systems, and union practices.

Research on changes over time has seldom focused on the mechanisms or institutions in the labor market which determine whether change does in fact occur but has emphasized changes in differentials and related factors. The mechanisms by which changes occur have been almost wholly sketched by inference and analogy from more general labor market studies. Moreover, research on the effectiveness of laws and commission actions to bring about changes in employment or income patterns has generally neglected the merits of different methods of effecting change as well as simultaneous changes in the affected labor markets. Many of these gaps could be closed as annual data from the Equal Employment Opportunity Commission become available for a dynamic analysis of the effect of a whole range of developments on employment patterns by race, sex, geographic area, occupation, and industry.

Priorities for additional research, in the author's opinion, are: (1) The structure and operation of labor markets including those within firms, distinguishing between the situations faced by the lower, working, and middle classes of minority groups; (2) a full-scale analysis of the characteristics, mechanics, and effects of pressure tactics to equalize employment opportunities; (3) the emerging minority middle class, particularly the relative importance of education, skills, capital accumulation, and mutual support in the form of information, financial assistance, and contacts and referrals; and (4) conceptualization of the phenomenon of discrimination itself—ever-present but ever-changing, affecting different groups in different ways at different times—and efforts to develop a theoretical structure which will deal with different kinds of minorities.

2.1.19 NATIONAL MANPOWER POLICY TASK FORCE
WASHINGTON, D.C.

CONTRACT NO. 81-09-70-03

Principal Staff: Dr. Sar A. Levitan and Lowell M. Glenn

Report Title: Report of Conference of New Manpower Researchers, October 1969

Abstract: This report describes the third in a series of annual conferences—this one held in September 1969—aimed at bringing together Ph.D. candidates who have dissertation grants from the Manpower Administration to discuss their work with their peers, government officials, and senior manpower specialists.

The first session of the conference was devoted to brief reviews of Federal manpower policy and its impact, pending manpower legislation, and the research program of the Manpower Administration.

At each of the six working sessions, three grant recipients gave short presentations describing their research. (A short summary of each presentation is included in the author's report along with a roundup of each session prepared by Department of Labor staff.) The working sessions were on the following subjects: Professional and Technical Manpower: Mobility and Migration; Urban Labor Market Problems; Work Incentives, Motivation, and Job Satisfaction; Theoretical Labor Market Analysis; and Public and Private Efforts to Alleviate Manpower Problems.

One new element in the 1969 conference was a panel discussion on "More Effective Implementation of the Grant Program." This provided an opportunity for grant recipients to learn about some of the mechanics of administering their grants and to offer suggestions for improving administrative procedures.

2.1.20 NEW YORK UNIVERSITY
NEW YORK, N.Y.

CONTRACT NO. 81-34-66-25

Principal Staff: Dr. Daniel E. Diamond and Dr. Hrach Bedrosian, School of Commerce

Report Title: Industry Hiring Requirements and the Employment of Disadvantaged Groups

Abstract: This study investigated the role of employers' hiring standards in the persistence of labor market imbalances that are manifest in concurrent shortages of workers in low-skilled jobs and high unemployment among disadvantaged workers. Ten major entry and near-entry occupations, where labor shortages were reported, were selected for simultaneous study in the New York and St. Louis standard metropolitan statistical areas. The occupations included five white-collar jobs (bank teller; cashier-checker; hotel clerk; salesperson, parts; and shipping and receiving clerk); four blue-collar jobs (arc welder; press feeder; production machine operator; and wireworker); and one service occupation (orderly). The various occupations were studied in different industries, representing 14 industry groups.

The analysis indicated little or no relationship between hiring standards and job performance (measured by earnings and supervisory ratings) for any of the occupations in a significant percentage of the companies studied. Moreover, the considerable variations in minimum requirements and preferences among employers for the same occupations demonstrated that even objective hiring standards may be influenced by subjective considerations.

For a given occupation, variations in standards were found among companies within the same area and between the two areas with respect to age, sex, education, previous work experience, appearance, and company policy on hiring applicants with police records or those who could not properly complete the application form. For example, in the case of wireworkers, whereas over two-thirds of the New York establishments expressed no preference on age, three-fourths of the St. Louis companies preferred workers between the ages of 22 and 45. Similarly, roughly four-fifths of the New York firms would not hire wireworkers who could not complete the application form, whereas nearly three-fifths of the St. Louis establishments would process them. To illustrate intra-area variations, about half of the hotels in St. Louis required clerks to have a high school diploma, approximately three-tenths wanted some high school short of a diploma, and the balance wanted an eighth-grade education, accepted less, or were uncertain.

Only the requirements with respect to previous work experience proved to have any consistently significant relationship to job performance. In seven cases, performance was linked with months of experience in the occupation and in three of these, also with months of experience in other jobs. However, work experience seemed critical only in certain occupations.

The researchers suggested that employers might better predict job success by evaluating certain worker traits (aptitude, interest, and temperament, for example) than by setting arbitrary hiring standards for age, sex, education, and even experience in some cases and recommended some simple tests of these traits. However, the most fundamental step in reassessing hiring standards was seen as the development of a written statement of hiring standards based on a careful analysis of job performance. Guidelines for developing such standards for each of the occupations are given in the report.

2.1.21 NEW YORK UNIVERSITY
NEW YORK, N.Y.

CONTRACT NO. 81-34-69-02

Principal Staff: Dr. R. David Corwin, Department of Sociology

Report Title: New Workers in the Banking Industry: A Minority Report

Abstract: To find out what factors account for improved minority employment patterns in the banking industry, this study examined the employment policies of six major New York City banks that have been leaders in hiring minority group workers (primarily Negroes and Puerto Ricans). Interviews were conducted with key administrative and supervisory personnel, new trainees, and workers; data were analyzed from reports of the Equal Employment Opportunity Commission.

A tight labor market, an expansion in banking, and the commitment of management were all found to have been instrumental in expanding the proportion of minority employees in the six banks from about 16 percent of total employees in January 1967 to about 26 percent in January 1969. At the time of the study, members of minority groups constituted close to half of all new hires.

In the process of broadening their recruitment practices to include such techniques as outreach to minority neighborhoods and ghetto high schools and the use of minority newspapers and employment agencies, the personnel departments of the banks had become more of a "rational bureaucracy." New hiring models had emerged in which requirements were based on skills specifically pertinent to the job, with rigid use of tests and formal credentials subordinated. Vestibule training programs had been added, primarily for entry-level jobs, and there were some programs for upgrading and sensitivity training for supervisors.

With the bulk of their minority workers in routine clerical positions, the banks were considering innovations to upgrade them to such middle-level jobs as computer programer and teller and also to manager and officer positions. In one bank, a new "staff development" unit suggested that the supervisor share his power to recommend promotions with the employee and a "neutral evaluator." Another bank required "promotion from within" in certain units, thereby greatly increasing minority promotions. Several of the banks had entered into special cooperative education programs with junior colleges and were involved in educational programs at predominantly black colleges.

Recommendations for improving minority employment patterns in the banking industry included use of an ombudsman to resolve disputes among minority workers, coworkers, and supervisors; provisions by the banks of a variety of services including day-care centers; expansion of bank-school internship programs; an extended period after hiring when workers would not be discharged for absenteeism; and the establishment of certain new careers in banking.

2.1.22 NORTH CAROLINA STATE UNIVERSITY, RALEIGH

RALEIGH, N.C. in cooperation with

NORTH CAROLINA AGRICULTURAL AND TECHNICAL COLLEGE

GREENSBORO, N.C.

CONTRACT NO. 81-35-67-27[1]

Principal Staff: Dr. Charles H. Rogers, Dr. Leonard J. Hausman, Dr. Christopher Green, Walter R. Parker, North Carolina State University, and Rudolph D. Artis, North Carolina Agricultural and Technical College

Report Title: Teenage Unemployment in Two Selected Rural Counties in the South

Abstract: This study sought reasons for the high unemployment rate among teenagers in the rural South, especially among Negro youth. Information was obtained in early 1968 in two rural counties in North Carolina from 345 teenagers who had graduated or dropped out of high school in the 1966–67 school year on their employment experiences, knowledge of the job market, jobseeking techniques, attitude toward work, education and training, and social and family background. Interviews were also conducted with a sample of employers and school officials to evaluate job opportunities and to assess the adequacy of occupational training facilities.

Unemployment rates of the teenage boys were not high compared with their nationwide levels, nor was the color difference (with unemployment rates of 9.9 percent for Negroes and 7.4 percent for whites) as great as expected. A larger proportion of Negro youth were, however, in low-wage, low-skill occupations; one-eighth of white men, but no Negroes, were in craft occupations. Far more of the white than of the Negro youth felt they had been rejected for employment in a job they were qualified for, suggesting that some Negroes looked only for "black" jobs. More Negroes felt, however, that their opportunity for advancement was limited. The Negro youth appeared to be more highly motivated, had gone further in school, and some had taken additional training in government programs. The young white men had taken more vocational courses in high school and were more likely to get additional training in aprenticeship programs, technical institutes, and company training programs.

Young Negro women were experiencing extreme difficulty in the labor market, with 40 percent unemployed. Of those employed, one-fifth were in household or other service occupations, and one-tenth were forced to accept part-time jobs. These facts could not be explained by other information obtained in the study.

Of the 116 employers interviewed, 77 preferred to hire a person over 20 years of age. Their reluctance to hire teenagers was attributed to lack of training, lack of stability and dependability, and uncertainty about the draft status of the young men.

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[1] Support for this project was also provided by the Office of Education, U.S. Department of Health, Education, and Welfare.

Although there was some occupational training offered in all 22 schools studied, it was frequently limited to courses in agriculture and home economics, especially in Negro schools. In only two schools were business and industry "frequently" involved in planning the occupational education program. All but two school principals felt that their vocational programs failed to meet student and labor market needs. Occupational counseling in the schools was minimal and only four schools had a job placement service.

To improve the position of teenagers in the labor market, the researchers recommended: (1) A cooperative program involving business and government to inform teenagers of the occupations available to them; (2) a placement service in the school dovetailed with business and industry recruitment; and (3) cooperation between business and the public schools in providing occupational training and work experience. The researchers also called for steps to eliminate existing inequalities in occupational training and an intensive study of the employment problems of black teenage women. (Such a study is now in progress; see **1.2.18.**)

2.1.23 NORTHEASTERN UNIVERSITY BOSTON, MASS.

CONTRACT NO. 81–20–34

Principal Staff: Dr. Morris A. Horowitz and Dr. Irwin L. Herrnstadt, Department of Economics

Report Title: A Study of the Training of Tool and Die Makers

Abstract: This is a comprehensive study of the makings of a skilled tradesman, along with a detailed evaluation of the effectiveness of alternative paths to this trade. The tool and die trade was selected for close examination because, although a relatively small group, these workers are crucial to the economy. The researchers interviewed more than 400 tool and die makers and more than 60 foremen, as well as other management personnel in more than 70 establishments and educators and public officials in Massachusetts.

Probably the most provocative finding was that not only is apprenticeship less common a route to expertise than found in previous studies (fewer than 30 percent of the journeymen had been apprenticed) but, according to this study, it is not necessarily the most effective method of training tool and die makers. Indeed, the study found that no single training path was clearly superior to the others.

Only one path, vocational high school combined with apprenticeship, scored well on most measures of effectiveness. These measures included foremen's ratings, the time needed to become an all-round craftsman, and the time needed to be classified as a toolmaker or diemaker. No path was consistently poor in all or most measures. "Picked-up-the-trade" was the path that took the most time for a man to become a craftsman and to be so classified but, according to the foremen's ratings, it compared favorably for effectiveness with other paths.

Of the six training paths distinguished by the researchers, those with the shortest training time were vocational high school (an average of 2.7 years), on-the-job training (2.9 years), and apprenticeship (3.4 years). By far the longest was picked-up-the-trade (7.3 years).

Considerable work experience appeared to be necessary before a man felt he was a competent craftsman. Counting both training time and experience, the man's shortest path to all-around competence was vocational high school coupled with apprenticeship. Individuals with this path estimated that they needed a median of 6.5 years of training and work experience after schooling to become competent all-round toolmakers and 8.0 years to become competent all-round diemakers. Apprenticeship by itself was nearly as short for toolmakers (7.0 years) but not for diemakers (10.0 years). Vocational high school by itself and picked-up-the-trade were the longest paths for both toolmaking and diemaking. Both took from 10 to 12 years to produce a proficient toolmaker or diemaker.

The authors argue very strongly for the retention of multiple training paths and that the government should not limit its support to one, since each offers potential craftsmen of varying age, experience, and education an opportunity to enter the trade. The authors also opt for diversification within a given path, since not all employers need all-round craftsmen.

The finding that students with trade inclinations were given little or no occupational guidance at a point when they had to choose educational programs substantiates other studies that support a more effective guidance program. Generally, there was a strong tendency for school counselors to depreciate the value of vocational education. The emphasis on a college education and white-collar employment seems to be robbing the skilled trades of attractive applicants, who go to college or technical school instead.

2.1.24 THE OHIO STATE UNIVERSITY RESEARCH FOUNDATION

COLUMBUS, OHIO

CONTRACT NO. 81–37–70–18[2]

Note—This item summarizes two separate studies completed under this continuing project (see **1.1.29**).

1. **Principal Staff:** Herbert S. Parnes, Karl Egge, Andrew I. Kohen, and Ronald M. Schmidt, Center for Human Resource Research

Report Title: The Pre-Retirement Years: A Longitudinal Study of Labor Market Experience of Men, Volume Two

Abstract: This report analyzes changes between mid-1966 and mid-1967 in the labor force situation of men aged 45 to 59 in the earlier year. It covers the second of six annual surveys of this cohort of men—one of four age-sex groups being surveyed.

Dramatic changes over one year were not expected, especially in a relatively stable labor market. About 1 percent of the men had died and 4½ percent could not be found for the second interview or refused to be interviewed. In addition, 12 percent experienced changes in their labor market situation.

Most of the changes increased the disadvantages of the black men vis-à-vis the white men. Altogether, 4.2 percent of the whites and 7.0 percent of the blacks changed their labor force status. Moves out of the labor force—usually from employment—accounted for about two-fifths of the changes in each case, but the remaining Negro men were evenly divided between those shifting to employment and those shifting to unemployment, whereas 1½ times as many white men found employment as joined the ranks of the unemployed. Similarly, although about 10 percent of both black and white wage and salary workers changed employers and virtually identical proportions did so voluntarily, fewer blacks than whites liked their new jobs better than their old. Family income, however, increased somewhat more, relatively and absolutely, for blacks than for whites.

More than one-fifth of the men reported changes in their health or physical conditions—for better or worse, and these changes were associated in the expected directions with movement into and out of the labor force.

The second survey confirmed the predictive value of several questions on attitudes. For men who were out of the labor force in 1966, responses to questions on jobseeking intentions and a hypothetical job offer differentiated between those who reentered the labor force and those who did not. Among the employed, job changing was higher among those who reacted favorably to a hypothetical job offer and those who expressed dissatisfaction with their 1966 jobs than among those who did not.

2. **Principal Staff:** John R. Shea, Ruth S. Spitz, and Frederick A. Zeller, Center for Human Resource Research

Report Title: Dual Careers: A Longitudinal Study of Labor Market Experience of Women, Volume I

Abstract: This report presents the findings of the first of six annual surveys of the labor force situation of women who were 30 to 44 years old when the survey was conducted in mid-1967.

At the time of the survey, five of every six of the women were married and living with their husbands. Nearly two-thirds of the remainder were widowed, divorced, or separated, and well over half of the entire group who were not "married with husband present" had children at home under the age of 18.

Perhaps the most striking characteristic of the data on the labor force situation of the women is the substantial variation observed on nearly every measure. The report on the study contains much rich detail about how a woman's marital and family status, her education and health, her color, and her attitudes toward home and work are related to her labor market activities. A few noteworthy findings are given here.

Overall, one-half of the women were in the labor force at the time of the survey, and only 4 percent of these were unemployed. Women were less likely to be in the labor force in areas of high unemployment than in areas of low unemployment and this difference was much greater among Negro women. Moreover, the incidence of unemployment in 1966 for women with children under 6 years of age was twice as high for Negroes as for whites.

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[2] Formerly contract no. 81–37–68–21. The Bureau of the Census draws samples and collects and tabulates the data. Ohio State prepares the data-collection schedules, plans the tabulations, analyzes the results, prepares reports on the annual surveys, and will write a final comprehensive report covering all of the surveys.

Three-fifths of the employed women were in white-collar jobs, one-fifth in blue-collar work, and the remainder, with the exception of 1 percent working on farms, had jobs in the service category. Over one-fifth of the women employed in wage and salary jobs usually worked part time—because they preferred to do so in the vast majority of cases. Hours of work appeared to be related in complex fashion to distance traveled to work, child-care arrangements, and, at least in some cases, choice of occupation. Negro women had to spend more time and money getting to and from work than white women. Negro mothers were much more likely to use relatives to care for children—white women earned more and were therefore better able to afford paid care.

The full-time workers contributed roughly a third of the total income of their families in 1966—with earnings somewhat lower but the share of family income somewhat higher among black women. Variations in pay and earnings undoubtedly were influenced by differences in the extent of upward occupational mobility.

Most of the women who were or had been married had not improved their occupational status during their working life, and those who had been out of the labor force longest fared the worst in this respect. Negro women high school graduates were much less likely to have started work in a white-collar job, and only a part of this difference was attributable to less prevalent training in typing or shorthand among the Negroes. Negro women in large cities were much more likely to have white-collar jobs and better pay than those in other areas; these differences were much less pronounced among white women.

2.1.25 OKLAHOMA STATE UNIVERSITY OF AGRICULTURE AND APPLIED SCIENCE, RESEARCH FOUNDATION

STILLWATER, OKLA.

CONTRACT NO. 81-38-69-10

Principal Staff: Dr. Paul V. Braden with James L. Harris and Krishan K. Paul, School of Occupational and Adult Education

Report Title: Occupational Training Information System

Abstract: This project developed a statewide occupational training information system (OTIS) in Oklahoma designed to collect and analyze information on the supply and demand for skilled manpower, on graduates of vocational education schools, and on components of the disadvantaged population. From this system a State plan for vocational education responsive to the projected needs of employers and students can be developed. The report contains documentation to facilitate adaptation of the system in other States or regions.

The system was designed to recycle annually and will provide data for statewide planning purposes every January. Information on skills covered by curriculums in the vocational education schools is needed yearly in order to effect changes in course offerings. The first cycle report was released in January 1969 based on data collected from August 1968 to January 1969; the second cycle extended from February 1969 to January 1970. The third cycle report will be released in January 1971 under the direction of the State Department of Vocational and Technical Education, which has been assigned responsibility for further development and continued operation of the system.

A central finding was that cooperative efforts by key State and local officials and the private sector are a basic requirement for establishment of this system.

Other significant findings were:

1. Vocational educators and industrial representatives preferred that demand for various occupations be collected on an "establishment" basis so that specific occupational information directly related to business needs could be gathered. Businessmen did not object to the release of their occupational needs to training officials.

2. Reporting procedures related to cost data per student and per program were not sufficiently refined for use as efficient inputs to the system.

3. In general, the project found that a great deal of data was inadequate or unavailable. This inhibited some of the analyses planned for the project. For

future cycles data on aptitudes and interests of potential students, intra- and interstate mobility patterns of graduates, and general administrative information such as the utility of schools in various parts of the State should be developed with great precision and detail. The development of more sophisticated demand estimates, particularly those identifying specific occupations for which training is offered in the schools, still present conceptual and practical problems.

On the basis of the relationship between supply and demand for vocational education graduates in Oklahoma shown by the OTIS data, the schools should allocate less money to vocational agricultural and technical education and more for distributive education, health education, home economics related to employer needs, office education, and trade and industrial education. Changes along these lines were made in the State's 1970–71 plans for vocational technical education.

2.1.26 THE PENNSYLVANIA STATE UNIVERSITY

UNIVERSITY PARK, PA.

CONTRACT NO. 81-40-69-06

Principal Staff: Dr. Jacob J. Kaufman and Dr. Louis Levine, The Institute for Research on Human Resources

Report Title: University Manpower Research Seminar for the Stimulation of Professional Research Interest

Abstract: This report presents a summary and evaluation of two seminars conducted in March 1969 by The Institute for Research on Human Resources of The Pennsylvania State University to attract social and behavioral scientists who recently received doctoral degrees to research in the manpower field.

Each seminar (one at Cornell University and one at Arizona State University) was limited to about 15 participants who were currently teaching in colleges and universities. None had received financial support for manpower research from the Department of Labor.

The seminars began with a presentation by a Labor Department official on developments in manpower programs and their implications for research. The remaining sessions were workshops on specific topics. Both seminars covered Employment of Minority Workers, Psychological Roots of Ghetto Hard-Core Unemployment, and Implementation and Support for Manpower Research, and a topic of regional interest (Farm Migrant and Rural Manpower Problems at Arizona State and the Utilization of Employed Manpower at Cornell).

Evaluation schedules were sent to participants several months after the seminars. Twenty-eight of the 34 participants responded. The overall reaction was favorable: the vast majority favored continuation of this type of seminar.

2.1.27 PURDUE RESEARCH FOUNDATION

LAFAYETTE, IND.

CONTRACT NO. 81-13-33

Principal Staff: Dr. Alfred S. Drew, School of Technology, Purdue University

Report Title: Educational and Training Adjustments in Selected Apprenticeable Trades

Abstract: This study focused on training in the apprenticeable trades as a complete system, from recruiting apprentices to updating the skills of journeymen, to identify the strengths and weaknesses of current programs and to suggest improvements. Covering apprenticeship and journeyman training in four trades —plumbing and pipefitting, machining and tool and die making, printing, and cooking—it is the most complete survey thus far made in this area.

Data were obtained between 1966 and 1968 from apprentices, journeymen, teachers, training coordinators, and high school students: from members of labor and employer groups, government agencies, and joint apprenticeship committees. Apprentices and journeymen were queried on their background and their attitudes toward their training, and journeymen were asked about their feelings toward obsolescence of their skills and their willingness to invest in additional training. National standards and experts' criteria for excellent programs were examined in 15 metropolitan areas.

The study confirmed much that has been surmised or partially known about apprenticeship; it also revealed new facts and relationships. It particularly pointed out gaps and weak areas that inhibit the optimum functioning of apprenticeship within a system of trade training. It emphasized the need for a more efficient administrative structure for many apprenticeship programs: for example, each apprenticeship program needs a joint apprenticeship committee and an administrator. And it underscored the need for better "related instruction" that is also better coordinated with on-the-job training. It also called for continuation training to help keep journeymen up to date and for relating such training to initial training. Other findings and recommendations spanned the entire system —from initial vocational education through continuing training for technological change—and identified some of the channels for adoption of new technology.

2.1.28 SYSTEM DEVELOPMENT CORPORATION
SANTA MONICA, CALIF.

CONTRACT NO. 81-05-68-28

Principal Staff: Dr. Marvin Adelson, Dr. Joseph Fink, and Dr. Harvey M. Adelman

Report Title: Manpower, Adjustment, and the System

Abstract: This study explored whether systems analysis techniques can improve current methods of dealing with manpower problems and what aspects of the systems approach can be used in developing manpower policy. A working model for dealing with problems of manpower adjustment was developed from historical data and information obtained in interviews with representatives of government, industrial, and academic organizations concerned with manpower problems.

The analysis stressed problems arising at job transition points in an individual's work career and examined the interaction of mechanisms and institutions involved in five subsystems of decisionmaking that determine the overall efficiency of individual manpower adjustments: (1) The Individual Subsystem—individual people; (2) the Education/Training Subsystem—schools and school systems, and other educational and training institutions and arrangements; (3) the Employer Subsystem—employers of all kinds; (4) the Facilitation Subsystem—organizations and arrangements such as labor unions and employment services, whose purpose is to mediate or facilitate the interactions of individuals with education and training institutions and employers and to help take up the slack when those interactions are unsatisfactory; and (5) the Maintenance/Innovation Subsystem—organizations and agencies that maintain the interactions of all of the subsystems within acceptable limits or act to change the system or its operation in legitimate ways.

For policy and planning purposes, the "system" task is not so much to match people with jobs, nor even to invest in human resources, but to develop a strategy for investing in manpower *adjustment*: i.e., improving the pattern and quality of the transitions people make to the extent that they promote both economic and human growth and development.

The authors concluded that the need for appropriate transitionmaking throughout all segments of the population and all life stages has important implications for the decision structures of each of the five subsystems of the manpower adjustment system. The rapidly increasing diversity of educational needs may call for some augmenting of the permanent educational establishment: for example, (1) introducing a bridging institution to facilitate the necessary transitions (especially from school to work and back again); (2) creating "blue-collar universities" for population groups not now receiving adequate educational attention; (3) supplementing the schools' resources by contracts with private suppliers for educational/training services and products; and (4) instituting a system for payments and other arrangements to facilitate transitions.

2.1.29 TRANSCENTURY CORPORATION
WASHINGTON, D.C.

CONTRACT NO. 81-09-69-08

Principal Staff: David S. North

Report Title: The Border Crossers, People Who Live in Mexico and Work in the United States

Abstract: This is a study of the Mexican residents who work in the border areas of Texas, New Mexico, and California and their impact on the resident American work force. Interviews were conducted in 1969 with a sample of border crossers, and a review was made of transcripts of Federal hearings, particularly those of the Select Commission on Western Hemisphere Immigration, Immigration and Naturalization Service (INS) records and policies, court opinions, and proposed legislation.

Although there is no ongoing system for counting the number of working border crossers, the researcher's estimates indicated a minimum total of 100,000—47,876 "green card" commuters (Mexican Nationals living in Mexico who are classified as permanent resident aliens of the United States with permanent U.S. visas), 18,259 citizen commuters (American citizens living in Mexico), with the remainder illegal entrants. This represents 11 percent of the labor force in U.S. counties bordering Mexico: they range as high as 47 percent of employment in some counties.

Various studies and statistics cited in this report suggested that commuters take jobs that otherwise would go to U.S. residents, depress wages, tend to reduce the likelihood of union representation, and tend to force U.S. workers into the agricultural migrant stream. At the same time, some border crossers benefit, directly or indirectly, from many Federal programs and often they do not meet their U.S. military and tax obligations. Moreover, the author found that their employers (especially those who hire illegal immigrants) are less likely to comply with labor standards and social insurance law than other employers.

Despite some recent tightening of the rules, current immigration practices generally do not protect the border labor market adequately from the adverse effect of commuters, in the researcher's opinion. The provision of the 1965 Immigration Act requiring that the Department of Labor approve the entrance of jobseekers is relatively ineffectual, the researcher found, because Mexicans who cannot get a Labor certification can often be admitted as close relatives of U.S. citizens or resident aliens (the status accorded green card commuters under INS regulations).

The executive branch of the Government has studied the commuter issue but so far there has been little change in its policy or regulations. Congress has considered but not enacted a variety of bills since 1967 to restrict and regulate commuters. Court decisions—primarily on the issue of commuters as strikebreakers—have implied a need for better regulation of commuters.

The researcher recommended a number of ways to tighten the border labor markets and inhibit the flow of commuters but pointed out that the entire package probably could not be adopted during the next few years. Among them: (1) Stop the process by which new green card commuters are created; (2) make sure that workers and employers are living up to Federal and State tax and labor standards; (3) start a process by which a green card commuter's right to commute would be examined yearly; (4) step up the drive against illegal entrants; (5) launch an economic development program for the border area; and (6) aid in the readjustment of green card workers to mitigate hardship that would result from a tight border policy.

2.1.30 UTAH STATE UNIVERSITY
LOGAN, UTAH

CONTRACT NO. 81–47–70–05

Principal Staff: Dr. H. Bruce Bylund, Department of Sociology

Report Title: Social, Cultural and Educational Factors Associated with Relative Vocational Success of Navajo High School Graduates

Abstract: This feasibility study analyzed educational and cultural influences on the vocational success of the Navajo—specifically, the 1964 "graduates" of the Intermountain School in Utah. The school records of all 171 graduates were examined, but only 80 could be found for interviews about their employment during the 5 years after graduation and their beliefs about Navajo customs and traditions. Although school data showed no great or consistent differences between those interviewed and those not interviewed, the smallness of the sample precluded definitive analysis.

The researcher also encountered interviewing problems. Students attending the vocational boarding school either lived in remote areas of the reservation where other schools were inaccessible or had been enrolled for social or welfare reasons. Nearly two-thirds of the graduates received certificates, rather than diplomas, and over two-fifths of those interviewed had completed less than 10 years of school. The interviewers found that many of the graduates were not familiar with relatively common words on the questionnaire. Moreover, many were unable to respond to unstructured questions.

A majority of the educational and cultural measures had, for this small sample, only a tenuous relationship to vocational success, which was measured by the amount of time since graduation spent in (1) active employment and (2) productive activity (employment plus schooling plus military service). These measures were not significantly correlated with educational and cultural measures for the female graduates, possibly because over one-third of them had spent less than half of the time since graduation in "productive activity." For the 37 men who were interviewed, the most powerful measure was the Intermountain teachers' ratings of the student's respect for property, which accounted for about one-fourth of the variation in productive activity. The man's knowledge of traditional stories explained another 8 percent of the variation, and two other measures—scores on a reading comprehension test and grade point average in vocational courses—each contributed another 6 percent of the explanation. The other nine analytical variables, taken together, explained less than 15 percent of the variation. The data did not permit analysis of several possibly significant variables, such as the type of vocational course pursued.

Despite great difficulties in locating and interviewing the graduates, the researcher concluded that it would be feasible, with reasonable time and effort to make a broader study covering a longer period. He believed that such a study could identify both the critical components of an education which would equip the Navajo people to lead a productive, meaningful life and those aspects of their culture which are incompatible with such a life.

2.1.31 WAYNE STATE UNIVERSITY
DETROIT, MICH.

CONTRACT NO. 81–24–66–04

Principal Staff: Dr. Reuben M. Baron and Dr. Alan R. Bass, Department of Psychology

Report Title: The Role of Social Reinforcement Parameters in Improving Trainee Task Performance and Self-Image

Abstract: This study was designed to test alternative strategies for influencing the motivation and training performance of disadvantaged youth. It assumed that improvement in a trainee's self-image would improve his motivation and, hence, his performance.

In four laboratory-type experiments, the subjects were assigned tasks involving word recognition, visual perception, motor coordination, and perceptual motor skills, which were selected to simulate the kinds of activities performed in training programs. As the experimental groups repeatedly performed these tasks, the researchers tested the effectiveness of social reinforcement of different types (material vs. verbal, praise of person vs. praise of performance), sources (peers vs. an authority figure), and schedules (frequency and direction: i.e., praise vs. criticism). Effectiveness was measured by changes in self-image (beliefs about self and evaluation of self) and in task performance.

In all four experiments, self-image improved much more than task performance. Other highlights of the findings were:

—In experiment 1, with Negro girls enrolled in nurse aide training, praise of person had practically no effect on performance, and praise of performance was effective on only one of three tasks. Praise was more effective if given less frequently (one in four trials) than more frequently (three in four trials).

—In experiment 2, with young men (mostly Negroes) enrolled in a skills center auto mechanic training program, material rewards were somewhat superior to verbal ones in enhancing performance, although verbal praise was superior for introspective individuals who needed social approval because of unfavorable past reinforcement experience.

—In experiment 3, involving Negro high school students in a summer vocational exploration program, peer reinforcement tended to be more potent than experimenter (authority) reinforcement. Criticism brought more improvement than praise in the performance of girls, but not boys.

—In experiment 4, the girls from experiment 3 persisted longer in trying to solve an insoluble puzzle when they received peer group reinforcement and when the experimenter was absent.

The researchers concluded that the most effective reinforcer was what each subject perceived as appropriate to the present situation and that this perception differed with past experience. Consequently, they recommended research to determine the kinds of past reinforcement, the relationship between self-image and task performance, and the extent to which laboratory research can be generalized to other settings.

Possible program implications stem from the findings that low levels of praise and/or criticism seemed more effective when white authority figures were giving the reinforcement; that rewards were more effective when matched to the trainee's personality type; and that reinforcement by peers was superior to reinforcement by a white authority figure.

2.1.32 WAYNE STATE UNIVERSITY DETROIT, MICH.

CONTRACT NO. 81–24–68–24

Principal Staff: Dr. Hjalmar Rosen and Dr. John E. Theahan, Department of Psychology

Report Title: A Group Orientation Approach to Facilitating the Work Adjustment of the Hard-Core Unemployed

Abstract: This study examined the effectiveness of two methods of orienting hard-core unemployed men hired by a large industrial company.

Before the hiring program began, management personnel were neutral toward it, while coworkers, union officials, supervisors, and other management officials had positive attitudes about the program. After the program, the attitudes were reversed. In fact, the company got an MA-4 contract for a new hard-core hiring program.

Forty-nine men were randomly assigned to either the company's customary job orientation program (which included talks by officials and staff and films) or experimental, professionally conducted group meetings structured to encourage free expression of attitudes and emotions growing out of their work and life situations.

The standard orientation proved to be superior to the experimental program in almost all measures of effectiveness—a finding which the researchers attributed to the standard program's ability to help workers cope with specific work-related problems. Although the 6-month turnover rates were comparable for the total hard-core group and regular new employees in equivalent job categories, turnover was significantly lower for those in the standard orientation program than for those in the experimental program. Both regular new employees and the company-trained group of the hard-core had significantly lower rates of unauthorized absences than the experimental group. Unexcused absences and/or irregular attendance were the basis for most terminations of hard-core workers. Three months after hire, a significantly higher proportion of company-trained employees than of the experimental group were recommended for merit increases by their supervisors.

Recommendations by the researchers stressed the need for firms to establish clear guidelines for supervising hard-core workers and discuss them with the immediate supervisors of these workers. The researchers also advocated establishment of a liaison office to provide information and counsel to both supervisors and hard-core workers, to serve as a communications link between them, and to investigate and mediate such problems as may arise. Essential information would include, for supervisors, a review of the characteristics of the hard-core who will become their subordinates, descriptions of problems and their solution, and feedback on the perceptions of the hard-core about their problems. For the hard-core, information should be provided on the advantages to which employees are entitled, company and community resources available to cope with personal (such as medical or legal) problems, the potential and procedure for advancement, and critical rules and regulations to which they must conform and the reasons behind the rules. Periodic discussion meetings should be held with both supervisors and the hard-core. Finally, the researchers recommended that loose standards of expected behavior be established for the initial employment period. To minimize dual standard complaints, they would bring the hard-core into the company as "work apprentices" at a rate below that usually assigned to the job and move them into regular employee status when they achieve the normal standards, with retroactive pay if appropriate.

2.1.33 WAYNE STATE UNIVERSITY DETROIT, MICH.

CONTRACT NO. 81–24–68–35

Principal Staff: Dr. Hjalmar Rosen, Dr. Gerald Cooke, and Dr. Lynn B. Anderson, Department of Psychology

Report Title: On-the-Job Orientation of Unemployed Negro Skill Center Trainees and Their Supervisors

Abstract: This study focused primarily upon young Negro women who would have been rejected had they applied for employment through regular channels at a large telephone company. They received job training at a skill center before going on the job and then a group of them participated in an experimental orientation program conducted by the researchers at the telephone company. The researchers evaluated the effectiveness of their orientation, which featured role playing in group problem-solving sessions, and analyzed the attitudes of the workers' supervisors, who were also exposed to such sessions.

The study found that in none of the four jobs studied did the employees with orientation have a better record of staying on the job than those who did not receive the orientation, which amounted to six 2-hour sessions for supervisors and nine 2-hour sessions for employees. Nor did orientation make for higher or lower merit ratings by supervisors.

In this study, two factors seemed significant in differentiating between "stays" and "leaves"—aspiration level (as deduced from earlier job experiences and education level) and indexes of familial maladjustment: i.e., divorce or dependence upon an extended family unit.

The researchers concluded from their study that, with a special employee group placed in regular jobs, no form of intervention should be practiced that (1) will disrupt the normal activity or schedule of the special employee, his coworkers, or his supervisor and (2) will single out the employee as needing special support or special treatment.

Social responsibility was found to have a negative value in orientation of supervisors. Work related factors were more important and should be stressed, in the researchers' opinion.

2.1.34 UNIVERSITY OF WISCONSIN
MADISON, WIS.

CONTRACT NO. 81-53-68-41

Principal Staff: Dr. Gerald G. Somers, Department of Economics, and Dr. J. Kenneth Little, Center for Studies in Vocational and Technical Education

Report Title: Cost-Benefit Analysis of Manpower Policies, Proceedings of a North American Conference

Abstract: The use of cost-benefit analysis has grown in recent years due to recognition of the desirability of making more rational decisions about the expenditure of public funds. At the same time critics have charged that cost-benefit calculations in particular and quantification in general would be unable to assess important but ill-defined noneconomic objectives. Further, if an agreement were made that economic criteria should rule, technical problems would prevent a successful application.

Against this background, this contract provided financial support for the preparation of papers and the presentation and discussion of the papers at a conference. The papers were divided into two groups. The first group was devoted to theoretical and methodological considerations of benefits, costs, the social discount rate, and the role of cost-benefit analysis in formulating manpower policy. The second group of papers considered the application of cost-benefit analysis to various manpower programs. The last paper of the conference discussed the validity and desirability of the human capital concept.

2.2 PROJECTS COMPLETED, JULY 1, 1969–JUNE 30, 1970—
Research Contracts Under the EOA and the SSA

2.2.01 BUREAU OF SOCIAL SCIENCE RESEARCH, INC.
WASHINGTON, D.C.

CONTRACT NO. 41–7–007–09

Principal Staff: Dr. Leonard H. Goodman and Thelma D. Myint

Report Title: The Economic Needs of Neighborhood Youth Corps Enrollees

Abstract: This study explored the question, "Are the employment provisions of the Neighborhood Youth Corps realistically geared to the economic needs of NYC enrollees?" Using methodology developed in a pilot study under a research grant (No. 91–09–66–33), the researchers surveyed the personal budgets (incomes and expenditures), the personal possessions (especially the wardrobes), and the consumer needs of a national sample of 2,000 young people enrolled in the in-school and out-of-school NYC programs in the spring of 1968. For comparison, the survey also covered about 500 classmates of the in-school group who were eligible for the NYC program but were still on the waiting list. NYC and school officials also provided data.

Median take-home pay from their NYC jobs was about $24 every 2 weeks for in-school enrollees and $75 for out-of-schoolers. Other income, usually from a second job, raised the average biweekly total to $32 and $100, respectively. However, for the majority of enrollees (88 percent) NYC was the only source of income.

Since the out-of-school group was typically older and many were household heads, their spending patterns closely resembled those of low-income families found in other expenditure surveys, with the major share of income going for the necessities of shelter and food. Even among the students, these items consumed over one-third of their modest income—either directly or as a contribution to the family.

Clothing took about half as much of the students' income as food and shelter, in line with other studies showing that youth of high school age spend more on clothing than any other age group but their immediate seniors (between the ages of 18 and 24). Moreover, the students' buying of clothes may legitimately be regarded as a part of school expenses, since nearly one-fifth of the out-of-school group said they had left school because they couldn't afford proper clothing.

Among the students, savings and insurance accounted for nearly 10 percent of income, transportation (almost exclusively for getting to and from school) a little more than 6 percent, and school expenses about 4 percent (more in the higher grades). The remaining quarter of income was distributed over personal possessions (such as wristwatches), personal care, entertainment, tobacco and alcohol, gifts, charitable contributions, and miscellaneous goods.

This pattern scarcely suggests frivolous spending. Much of it represented spending for modestly priced items that many middle-class boys and girls take for granted. In comparison with their fellow students, however, both the boys and girls had more clothing and more personal possessions—mostly acquired since joining the NYC.

Yet only 11 percent of the NYC students said they had no further needs. The greatest need, mentioned by one-fifth, was "a better place to live" and almost as many said clothing. The third priority (listed by 15 percent) was money for school, followed closely by medical and dental care. Smaller proportions of enrollees mentioned personal care, recreation, and food. Less than three-fifths of the group, however, expressed a need for more money: the median amount needed was $13 a week. They said they would like to earn this money by working longer hours at their NYC jobs.

If changes in rates of paying for NYC jobs were to be made, the researchers suggested that the provision of additional income in the senior year would help to compensate for heavy graduation costs and serve as an extra incentive to graduate.

2.2.02 BUREAU OF SOCIAL SCIENCE RESEARCH, INC.

WASHINGTON, D.C.

CONTRACT NO. 51-09-69-03

Principal Staff: Dr. Leonard H. Goodman, Laure M. Sharp, and Jean Ruffin

Report Title: Employment Contexts and Disadvantaged Workers: Phase I—Final Report

Abstract: This feasibility study developed the methodology for an extensive investigation of the employment situations of welfare recipients trained and placed under the WIN Program. (See **1.2.03** for a description of the new study.) The original study focused on employer attitudes toward WIN workers, provisions for integrating them into various employment settings, and the adjustment problems encountered.

Preliminary questionnaires and field procedures were developed and tested on a sample of 65 employers of WIN workers in Denver, Washington, D.C., San Diego, and San Bernardino. In each employing firm or agency, a high-level management representative and the immediate supervisors of WIN workers were interviewed.

Placements of WIN participants were generally less concentrated than expected. Usually, the employer had only one or two, or if he had more, they were scattered through the organization. The consequence was relatively low visibility of WIN workers in employment settings, although this did not signify an absence of adjustment problems.

Other circumstances also helped to blur any demarcation between WIN workers and the regular work force. Many WIN workers were in low-skill, hard-to-fill jobs which are traditionally filled by disadvantaged workers. Some of those who were placed in better jobs were men or women with a fair amount of education and work experience who had been temporarily receiving welfare because of illness, childbirth, or other nonpermanent, disabling conditions. Moreover, a fair number of WIN workers had found the jobs on their own, rather than being placed through the program. Furthermore, employers often lumped WIN workers with those from other training programs.

Employers apparently participated in the program for one of three reasons: They used the WIN Program as an inexpensive means of training and screening the most "problem-free" for future employment; they considered it as a community service function, training for placement elsewhere; or they used it as a source of inexpensive temporary labor. Obviously, the carryover value of the training would vary greatly with the employer's motivation for participating.

At the time of the field work, the number of placements in public agencies suggested that considerable attention should be devoted to civil service regulations and the extent to which they inhibit the recruitment and placement of WIN workers.

2.2.03 CASE WESTERN RESERVE UNIVERSITY

CLEVELAND, OHIO

CONTRACT NO. 41-7-002-37

Principal Staff: Melvin E. Allerhand, Dr. Frank Friedlander, James E. Malone, Dr. Herman Medow, and Marvin Rosenberg, Department of Psychology

Report Title: A Study of Impact and Effectiveness of the Comprehensive Manpower Project of Cleveland (AIM-JOBS)

Abstract: This study examined AIM-JOBS, the first Concentrated Employment Program (CEP), established in Cleveland in 1967. This CEP had the goal of ". . . placing securely in permanent jobs at least 2,000 disadvantaged residents of inner city poverty areas. . . ." —a goal which reportedly was surpassed within 1 year. The researchers evaluated the program's effectiveness during its first 16 months and studied its influence on participating companies. They gathered data on worker participants at the beginning of orientation, at its finish, and 6 months after participants began to work. Information was also gathered from the staff of the coaching and job development departments, from the project's governing board, and from a 20-percent sample of participating employers.

No significant changes were found in work-related attitudes and behavior as a result of the 2-week orientation program or as a result of placement and work experience. In general, neither the initial attitudes nor the biographic/demographic characteristics examined were found to predict job success as measured by supervisors' evaluation or job retention. Supervisors rated the participants as being on a par with other employees in competence, effort, and sociability, but less reliable. The stability of an employee or trainee was found to be inversely related to the duration of his unemployment before enrollment in the program.

Most employees felt that the work climate was very bad: the supervisors viewed the same situation as supportive. Some workers reacted to this situation through absenteeism and tardiness: the more reliable ones through early separation from the job. Only 18 percent of the participants remained on jobs for an uninterrupted period of 6 months or longer, and another 29 percent stayed this long in either training or a combination of training and work. In the New Careers part of the program in public agencies, more than 90 percent of the participants were retained for at least 6 months.

As in other studies, the researchers found that relatively few employers were participating in the program: the majority of those that were participating had hired four or fewer participants. They hired if they had an opening: no attempts were made to create new positions for AIM participants. Fifty-five percent established no new procedures or policies because of the AIM program. Companies with high retention rates tended to change their policies much more than companies with low rates.

Employers viewed continued cooperation with AIM almost exclusively in terms of their own manpower needs and not in terms of preparing unskilled people for jobs.

On a group basis, AIM workers were rated favorably by employers on work habits, attitudes, and quality of work and less favorably on preparation.

There have been a number of changes in the program since the study, but some of its implications still have significance for the current emphasis on job retention and upgrading.

The researchers believed that more intensive follow-up, high-quality training, and creative job development are essential to high retention rates.

Critical factors in high-retention companies in the study were: Entry level wages of at least $2.40 an hour. medium-size company (101–500 employees). supportive work climate, low expectations by the employer, and a low normal turnover rate.

In the Cleveland project, the authors found, the major emphasis on meeting the job placement quota led to a program strategy of changing the participants to fit available jobs and being oversolicitous of employers (who did not seem to be viewed by staff as part of the program).

They also recommended moving orientation and training from the staff headquarters to the companies. They suggested, to be more specific, that sessions between the supervisor and groups of new workers could be helpful: i.e., exploration of differences in opinion about the degrees to which the job climate is supportive and problems of reliability.

2.2.04 CORNELL UNIVERSITY
NEW YORK, N.Y.

CONTRACT NO. 41–9–003–34

Principal Staff: Paul L. Gaurnier and Dr. William Fisher, School of Hotel Administration

Report Title: A Study of Career Ladders and Manpower Development for Non-Management Personnel in the Food Service Industry

Abstract: This study aimed to develop a plan by which the food service industry could reduce turnover and improve career opportunities for nonmanagement personnel (such as dishwashers, busboys, waitresses, kitchen helpers, and pantrymen).

Case studies were developed for 18 organizations (restaurant chains, fast-food organizations, hotel and motel corporations, industrial feeding firms, airline food service units, and cafeteria chains) in 14 major cities. Personnel directors and training staff were interviewed on existing training programs, personnel requirements (educational, physical, and skill), recruitment policies and procedures, promotional opportunities, turnover rates, and employee compensation. Over 300 employees gave information to interviewers on their personal characteristics, educational and employment backgrounds, and experiences with and views on their present employment situation—including training, working conditions, job satisfaction, and promotional opportunities. Over 100 former employees of the 18 organizations were contacted to determine their reasons for leaving.

Workers can easily enter and easily leave the food service industry, the researchers found. For nonmanagement personnel, they identified no educational or physical requisites, and entry-level positions required no skill or previous experience if the company had an effective training program. Labor turnover rates were alarmingly high, especially in the dishwasher and service function area and during the first 3 months of employment. These findings, the researchers concluded, reflect the workers' generally poor image of the industry—relatively low wages, minimal fringe benefits, lack of clearly defined career potential, poor—if any—job training, the absence of uniform standards, and, in some instances, "deplorable physical working conditions."

The psychological work environment (employee expectations and relationships with supervisors and peers) was judged to be at least as important as physical working conditions for nonmanagement personnel. Job satisfaction, employee motivation, and efficiency could be promoted through human relations training and development founded on respect for human dignity.

The researchers presented an illustrative model of a career-ladder system for a large food service firm. This model identified four departmental progression systems—support, production, control, and service—and demonstrated the interrelationships that can exist among different departments. For example, an employee hired as a busboy may cross-train in the production area starting as a vegetable preparation man, or may become interested in the control area and cross-train as a food runner or receiving clerk.

The researchers suggested that to improve manpower development in this industry, an organization must give equal consideration to the following seven elements: (1) Analyzing the company's manpower needs, (2) improving physical and psychological working conditions, (3) providing orientation for new employees, (4) providing more formal job training, (5) increasing wages and fringe benefits, (6) improving the image of the industry as a whole, and (7) defining visible avenues for advancement.

2.2.05 UNIVERSITY OF MINNESOTA
MINNEAPOLIS, MINN.

CONTRACT NO. 41-7-008-25

Principal Staff: Dr. Richard E. Sykes, Social Science Program

Report Title: A Pilot Study in Observational Measurement of Behavioral Factors Associated with Increased Employability of Out-of-School Neighborhood Youth Corps Enrollees

Abstract: This study sought to develop tools for predicting the employability of youth in the Neighborhood Youth Corps out-of-school segment from measures of behaviors signifying readiness for regular employment and upward job mobility. Job readiness included attendance, promptness, verbal interaction with coworkers and supervisors, dress, and appearance: upward mobility, the performance of specific skills, ability to handle a variety of tasks, and acceptance of responsibility.

Data for the measures were obtained by observations of what 95 enrollees and other people in the work groups to which they were assigned actually did and said. The analysis emphasized the measures for 62 enrollees for whom two or more observations were made between January and September 1968 at three urban NYC projects in Minnesota. The data were recorded on new equipment developed as part of the Minnesota Interaction Data Coding and Reduction System which enables the observer to code behavior as it takes place on a record which is later automatically decoded onto a computer tape.

Most enrollees were found to have been virtually job ready when they came to the project, and most of those who were not soon became so. These youth, including most of the younger boys, were soon able to find better paying and more interesting work. Long tenure with little improvement, on the other hand, tended to characterize older girls of rather limited ability who were placed in supportive, nondemanding work roles in which they performed more or less routine clerical duties. Thus, improvement of work habits tended to be negatively correlated with long tenure in NYC. The researcher observed that the work group and supervisory factors associated with long tenure and the improvement of work habits were not only different, but may be antithetical.

Improvement of work habits was found to be closely related to the social context at the worksite. Learning through work experience involved not only acquiring work skills and good work habits, but learning how to relate to other members of the work group, how to judge the legitimacy of the supervisor's authority, and how to know the standards of performance demanded by particular supervisors. If the enrollee was put in a

group with adult nonsupervisory workers performing similar tasks, he was able to use their behavior as a pattern for many of his own relationships and judgments. The presence of a fellow enrollee meant that the two enrollees could provide each other with support and friendship as well as a comparative standard for judging their own treatment by the supervisor.

The study found the greatest improvement in the behavior of enrollees who were placed in a work group that was "businesslike" in its preoccupation with work and in which a good deal of work-related communication took place. It also helped if the work supervisor was present part of the time. This was not the case in a number of work groups, and the study turned up little evidence that supervisors had high standards for enrollees or provided feedback which would improve performance.

The researcher concluded that the NYC should provide work experience in a social context which will facilitate the transition from adolescent to adult worker for youth who have the ability to work in the private sector. Where such youth rebel because they see themselves as destined for low-level, dead-end jobs, the NYC might formally develop an expectation of a series of graduated placements, explaining that the initial placement is temporary and that progress to more desirable assignments is conditioned on performance. Greater efforts to find worksites in private industry which would offer the possibility of skill acquisition and permanent employment would also be desirable. For certain youth of rather limited ability and for those whose vocational expectations are limited to the relatively short run (such as women who primarily want to marry and raise a family), NYC should provide essentially a sheltered workshop or temporary employment, in the researcher's view.

2.2.06 UNIVERSITY OF MINNESOTA
MINNEAPOLIS, MINN.

CONTRACT NO. 41–8–003–25

Principal Staff: R. Frank Falk, General College and Minnesota Center for Sociological Research

Report Title: The Frontier of Action: New Careers for the Poor—A Viable Concept

Abstract: Information obtained from enrollees at the time they entered the New Careers program, which was funded in August 1967, shows that enrollees were predominantly women, had an average age of about 30, and slightly more than half were from minority groups. Three-fifths had graduated from high school and one-fifth had some college training. Nearly half were self-supporting before they became New Careerists, but about one-third were on welfare. Those who were self-supporting generally worked in low-status jobs and received about the same or more income as they received while in the New Careers program.

This study of enrollees in the Minneapolis New Careers program investigated their personal and social-psychological characteristics (including work satisfaction, the individual's self-concept and self-regard, and his educational ability, desires, and satisfaction). It also examined their work assignments and their performance in the educational part of the program.

Data were collected by questionnaires from all 281 enrollees in the 2-year program and over 200 were interviewed. Extensive efforts were made to follow up on the 105 program dropouts.

The data revealed some significant improvements in the self-concept of enrollees, maintenance of their fairly high aspirations for mobility, and a slight trend toward professionalization of enrollees. None of these measures distinguished dropouts from those who remained in the program.

Outcomes could be improved, the researcher believed, if some problems were resolved: Clear-cut decisions on who handles what types of problems need to be made and specified in writing: professionals working as supervisors need a major training program in how to develop a variety of tasks incorporating some independence of action; and so New Careerists can become an active part of the agency, they should be invited and required to attend formal meetings of professional staff. Finally, the researchers detailed steps that should be taken to meet the need for a meaningful inservice training program for staff and enrollees.

2.2.07 NATIONAL LEAGUE OF CITIES
WASHINGTON, D.C.

CONTRACT NO. 41–8–001–09

Principal Staff: Floyd A. Decker, Andrew B. Horgan, III, and Lawrence A. Williams

Report Title: Municipal Government Efforts to Provide Career Employment Opportunities for the Disadvantaged

Abstract: This study examined municipal programs in six cities (Dayton, Detroit, El Paso, New York, San Francisco, and Washington, D.C.) that provide opportunities to the disadvantaged for employment and training in the competitive municipal service. Interviews were conducted in 1968 with city officials, workers employed in the programs, and representatives of labor unions, minority groups, public and private poverty agencies, and businesses.

All the cities had federally sponsored programs (usually of the New Careers variety), but only New York had any substantial municipally initiated and funded projects. Only in Dayton and New York did the number of workers in the programs exceed 1 percent of total city employment. Hence, the programs could not meet the twin aims of significantly reducing municipal manpower shortages and lessening unemployment among the disadvantaged. The researchers laid these shortcomings to inadequate funding and the restriction of the program by local sponsors (usually the Community Action Agency) to jobs in the "human service" fields which were listed illustratively in the Economic Opportunity Act. Not only were these jobs unattractive to Negro men, but many were not part of a career ladder because planning time was too short and job development was carried on by persons inexperienced in city government, according to the researchers.

Nevertheless, these programs did improve the content and delivery of municipal services where the workers were concentrated in one agency, as in New York, or where smaller numbers were assigned to single units within agencies, as in Detroit and San Francisco. The New Careerists freed the professional staff from many routine clerical and administrative duties and, at the same time, gave them time to provide more personalized assistance to clients.

Most supervisors and fellow workers expressed satisfaction with the attitude and performance of the New Careerists. The favorable impact of the programs on the enrollees themselves was evident from their expression of raised hopes, expectations, and ambitions and their high retention rates (turnover rates of less than 5 percent in San Francisco and 15 percent in New York, for example).

Noting that the programs rarely required much organizational restructuring or major changes in civil service provisions or administrative regulations, the researchers enunciated six basic principles for establishing an effective city career opportunity program for residents of deprived urban neighborhoods. Briefly, these are: (1) Developing political and executive leadership and support; (2) lodging responsibility for planning, job development, and administration in a municipal agency experienced in personnel administration; (3) drawing in other agencies (e.g., schools and the employment service) to participate in planning and job development; (4) examining all municipal agencies as sources of career opportunities; (5) putting the entry-level jobs under the civil service and realistically linking them to a career ladder; and (6) completing planning and development before beginning operations.

Many of these principles guided the design of the new Public Service Careers program by a task force to which the principal investigator served as consultant.

2.2.08 NORTH STAR RESEARCH AND DEVELOPMENT INSTITUTE
MINNEAPOLIS, MINN.

CONTRACT NO. 41–7–006–25

Principal Staff: Dr. Guy H. Miles, William F. Henry, and Ronald N. Taylor

Report Title: Final Report on Optimizing the Benefits of Neighborhood Youth Corps Projects For Rural Youth—Phase 2: A Follow-up Study of 1,144 Young Adults

Abstract: This two-phase project sought to provide guidelines for an effective Neighborhood Youth Corps program in rural areas. A literature survey (see **3.2.11**) and the phase 1 study (see **3.2.12**) led the researchers to conclude that rural NYC projects can be effective only if they help to prepare rural youth for urban occupations and urban living. Phase 2 tested the hypotheses developed in phase 1 and explored factors that bring about heavy rural outmigration, elements associated with adequate adjustment to urban life, and ways in which NYC might ease the rural to urban transition. For this phase, 18 counties located in 11 States in the north-central region were selected. Four small cities in four of the counties were selected for control purposes. Questionnaires asking for information on their early history, social adjustment, advanced education, and migration patterns were sent to a random sample of youth selected from all students enrolled in the eighth grade in these counties and cities during the 1960–61 school year who would have been eligible to enter an NYC project had one been available. A total of 1,144 completed questionnaires (72 percent of the sample) were returned.

Only 16 percent of the youth sampled remained in their home communities during the 3-year period following the date they graduated—or would have graduated—from high school: 77 percent moved to a city. The out-migration rate for women was considerably higher than for men. The youth most likely to be served by NYC (school dropouts, those from low-income families, and lower grade students) were much less inclined to leave rural areas and more inclined to return if they did. Failure to adjust to urban life was implied by high return rates for noncollege migrants: 25 percent of the young women and 43 percent of the young men returned to a rural area within 3 years.

Very few characteristics of the rural areas were found to influence the rate of out-migration. Low median family income was most closely associated with high out-migration rates. Less important were availability of factory employment and the relative lack of cultural facilities in the county.

No evidence was found that the noncollege migrant was at a severe disadvantage educationally in finding employment or making a social adjustment. However, lack of counseling was found to be related to low entry-level salaries and poor socialization of youth who migrated. Most of the men who did not go to college went into blue-collar jobs; the women into white-collar jobs. Those who found low-level work were much more inclined to return to their home area than those in higher level jobs.

The authors felt the most obvious need neglected by the NYC programs is adequate preparation of rural youth for urban living. They suggested that NYC could, for example, acquaint enrollees with job-finding methods and furnish information on urban occupations, training opportunities, and services. Other recommendations included: (1) More flexible guidelines for entry into NYC by redefining "disadvantaged" to give equal weight to low income and to geographical and social isolation; (2) deemphasizing part-time job aspects of NYC in rural projects; (3) supplementing the rural educational system through vocational training, occupational familiarization, counseling, and special education where needed; and (4) modifying administrative concepts to include cooperation between NYC projects in rural areas and those in adjacent urban growth centers.

2.2.09 STATEN ISLAND MENTAL HEALTH SOCIETY, INC.

STATEN ISLAND, N.Y.

CONTRACT NO. 41–7–009–34

Principal Staff: Dr. Wallace Mandell, Sheldon Blackman, and Dr. Clyde E. Sullivan, Wakoff Research Center

Report Title: Disadvantaged Youth Approaching the World of Work: A Study of NYC Enrollees in New York City

Abstract: This study compares views concerning the demands and benefits of employment held by: (1) NYC enrollees, their NYC work supervisors, and potential employers, and (2) NYC enrollees in the early and late stages of enrollment. Information was sought on views about skill requirements (i.e., education, speaking ability, or vocational preparation); standards of behavior on and off the job (i.e., punctuality, dress, and use of narcotics); employers' expectations of new employees in their relationships with fellow workers and with supervisors; ways in which prospective employees are "tested" against the job requirements; and the conduct of employment interviews.

The study was conducted in the summer of 1968 at nine out-of-school NYC projects in the poorest areas of New York City, using residents of these areas as interviewers. The early-late comparisons are based on interviews with 297 enrollees in their first 3 months in the NYC and 311 in their last 3 months. For the enrollee-supervisor-employer comparisons, 74 of the latter enrollees who sought jobs were reinterviewed after their job hunt, but interviews with both their NYC supervisors and the employers to whom they had applied could be obtained for only 40 of them.

By every measure, the youth saw the work situation as far more stringent and demanding than did either their supervisors or the employers. Although all three groups agreed that the youth lacked preparation, supervisors and employers, unlike the youth themselves, believed that little preparation was needed for the jobs they sought. Both enrollees and supervisors rated work experience as a more essential qualification than did employers, who held NYC experience in especially low esteem. Enrollees saw personal and work-related references as the critical element in getting a job, whereas supervisors and employers agreed that the interview was most critical. All three groups agreed that applicants should ask about employee benefits, but a quarter of the enrollees said they would take the job and find out later about benefits.

Comparisons between enrollees in the early and late stages showed significant differences on only 13 of 145 items, and these differences had no pattern. Hence, their NYC experience had not changed the youths' view of themselves as essentially unprepared for entrance into employment or their overly strict views of employer requirements. And, although they exaggerated the value of their NYC experience to an employer, only one-third of them intended to look for related jobs when they left NYC.

The authors therefore concluded that NYC projects ought to deemphasize work orientation and emphasize the provision of work credentials, access routes to work, and a realistic view of the working world—which disadvantaged youth can rarely get through their parents or on their own and which the NYC projects in New York City did not provide despite valiant staff efforts to do so. The need is for training and experience which can be transferred to private employment and which is therefore usually not available through nonprofit agencies which employ NYC enrollees. There is also need for help in job placement, programs for restructuring jobs to eliminate dead-end entry jobs, and legal approaches to equalizing employment opportunities.

Programs such as these also need to be tailored to individual participants, in the authors' opinion. They singled out four types of youth who especially need individualized services: Youth with no employment goals in the "legitimate" economy; youth with unrealistically high aspirations; youth floundering in the labor market for lack of information; and youth who need a sheltered work situation free of the stresses of the market place.

2.3 PROJECTS COMPLETED, JULY 1, 1969–JUNE 30, 1970— Doctoral Dissertation Grants Under the MDTA

2.3.01 THE AMERICAN UNIVERSITY WASHINGTON, D.C.

GRANT NO. 91–09–70–29

Doctoral Candidate: Markley Roberts, Department of Economics

Sponsor: Dr. Howard Wachtel

Dissertation: Pre-Apprenticeship Training for Disadvantaged Youth: A Cost-Benefit Study of Training by Project Build in Washington, D.C.

Abstract: This study considered whether preapprenticeship training to prepare disadvantaged inner-city youth for entry into building trades occupations was an effective investment in "underdeveloped" human resources. It attempted to determine how economically worthwhile such an investment was and to discover variables which affected the relative success of disadvantaged youth entering the labor market.

Interviews were conducted in late 1969 with all of the 1968 applicants for preapprenticeship training at Project Build in Washington, D.C., who could be found: 110 who had completed the 6-month training program; 20 who had dropped out; and 65 who were not selected or did not enter the program. Information was secured on earnings, annual income, and unemployment as well as on age and family responsibilities for 1 year before and 1 year after the application for entry into the project. In addition, Project Build furnished information through its records and reports.

The primary purpose of Project Build was placement of trainees in building trades apprenticeships. In this it appeared successful, since 87 percent of its first-year trainees who completed the program entered apprenticeships, and one year later 53 percent were still in apprenticeships.

Among the reasons for the success of the program was the growing recognition in the local community of a need to bring more black workers into the construction industry; the commitment of the local labor unions to open up more apprenticeship and job opportunities in the industry; and the fact that training included remedial education as well as orientation to work, introduction to the construction industry, preskill training, counseling, and followup supportive services.

During the year following their application for the program, Project Build graduates reduced their annual unemployment rate by more than 10 percent and increased their average hourly earnings by about 60 percent, weekly earnings by about 55 percent, and after tax weekly income by almost 60 percent. During the comparable period the average hourly earnings for the nontrainee control group increased by about 20 percent, weekly earnings by about 15 percent, and after-tax weekly income by 14 percent. Not all of the differences between the two groups could be attributed to the training, in part because the average age of the control group was 19, compared with 21 for the graduates.

The analysis showed that a relatively high, fast, economic payoff resulted from the training. The return came rapidly to the youth themselves, the economy, and society and more slowly to government.

2.3.02 BOWLING GREEN STATE UNIVERSITY BOWLING GREEN, OHIO

GRANT NO. 91–37–69–16

Doctoral Candidate: Stephen Wollack, Department of Psychology

Sponsor: Dr. Patricia C. Smith

Dissertation: The Effects of Work Rate Upon Job Satisfaction

Abstract: This study tested the hypothesis that discrepancies between the assigned rate of work production and a person's preferred, or normal, rate of work are associated with dissatisfaction. Assigned rates higher than normal were predicted to be associated with fatigue, while below-normal rates were thought to be associated with boredom.

Eighty subjects employed at a local factory were hired specifically for this study. They were assigned at random to do one of two tasks—an inspection task and an assembly task—at another Bowling Green firm. Both tasks were continuous operations with regular cycle times. A 4-day learning period was provided. The fourth day's output was used as the base rate (each worker's average or "preferred" rate of work). On the fifth day, the subjects from each task were divided into five groups and were assigned a different work rate, ranging from 14 percent slower than their base rate to 14 percent faster. Measures were obtained of satisfaction, fatigue, boredom, and the subject's perception of the assigned rate of work (on a scale ranging from much too fast to much too slow).

The analyses based on actual work rates did not support the hypothesis. However, analyses using the subject's perception of the assigned work rate gave results which were consistent with the hypothesis. The implications of this finding are not clear, because (1) measures of perceived work rate were only moderately correlated with actual rate of work and (2) the data did not show whether satisfaction determined the perception of the work rates or the opposite.

2.3.03 BOWLING GREEN STATE UNIVERSITY

BOWLING GREEN, OHIO

GRANT NO. 91-37-69-17

Doctoral Candidate: Frank J. Landy, Department of Psychology

Sponsor: Dr. Robert M. Guion

Dissertation: A Typological Approach to the Relationship Between the Motivation to Work and Job Satisfaction

Abstract: The two major objectives of this study were (1) to determine if a type of job satisfaction could be found for each type of motivation to work and (2) to discover whether various motivation and satisfaction types were characterized by differing lengths of time in a profession.

On the assumption that individuals from a single occupation have the same potential rewards available to them, the researchers queried engineers from six different organizations. The questionnaire covered satisfaction, motivation, performance, and general descriptive work history. The engineers were then rated by coworkers on work motivation and performance.

Five reliable, interpretable dimensions of the satisfaction inventory were: Advancement, ethical principles, creativity, pay, and working conditions. Factor and cluster analyses of the motivation scales yielded three dimensions: Professional identification, team attitudes, and task concentration. Factor and cluster analyses of the performance scales yielded three dimensions: Problem weighting and communication of results, use of personnel resources, and personal ethics. The researcher developed a complementary matrix on the basis of the satisfaction and motivational scores for each engineer's motivation and satisfaction type. Work history variables and performance dimensions were then related to both satisfaction and motivation types in the matrix. Too many groups emerged for meaningful analysis.

The results of the study suggested that knowledge of an engineer's motivational type did not enable one to predict the same engineer's satisfaction pattern; certain types of satisfaction seemed to be characterized by different lengths of service in the profession, but length of service seemed to have no relationship to motivational type; in the present sample, motivational type seemed to act as a moderator of the relationship between job satisfaction and job performance.

The major proposition of the study, that complementary motivation and satisfaction types could be found, received no support from the research.

2.3.04 BRANDEIS UNIVERSITY

WALTHAM, MASS.

GRANT NO. 91-23-68-45

Doctoral Candidate: Lynda Lytle Holmstrom, Department of Sociology

Sponsor: Dr. Everett C. Hughes

Dissertation: Intertwining Career Patterns of Husbands and Wives in Certain Professions

Abstract: This study analyzed the problems that two-career families meet, the effects of the wife's career on both husband and wife, and how a selected group of two-career families met those problems. Data from "free-style" interviews of 20 couples with wives who pursued a career and seven (the companion group) with wives who had curtailed their careers were supplemented by information from a variety of other sources.

While there are other barriers to careers for women, such as outright sex discrimination, the study focused on those presented by the structure of the occupational and familial systems. On the occupational side, the greatest barrier was the rigidity of the system, which gave preference to full-time, uninterrupted careers and in which geographic mobility was important. On the familial side, the single greatest obstacle was the structural isolation of the nuclear family, which must be largely self-sufficient and in which the wife was required to remain at home with young children.

Overall, the career wives fared very well relative to the companion wives. Relative to their own husbands, however, they fared less well, and were still far from equal. Difficulties arising from either the structural or the familial system were consistently resolved in favor of the men: The husband's career was more important: if anyone took a career risk in movement from one locale to another, it was the wife: antinepotism rules were used against the wife, not against the husband: and no matter how much household duties were shared, they were still the wife's final responsibility.

The two-career couples organized their lives to combat the barriers they met and had deviated in many ways from middle-class norms. On the whole, the career wives gave little attention to their hostess roles; they employed more outside help and received more help from their husbands in family responsibilities than the wives in the companion group.

2.3.05 BRANDEIS UNIVERSITY
WALTHAM, MASS.

GRANT NO. 91–23–68–46

Doctoral Candidate: Donald W. Light, Jr., Department of Sociology

Sponsor: Dr. Morris S. Schwartz

Dissertation: The Socialization and Training of Psychiatrists

Abstract: This study investigated how the psychiatric profession socializes new members and how they learn to make sense of their world. It sought to discover how young men learn, define, and understand the job of controlling and managing a major form of deviance in the society.

The data came from participant observation, primarily of the first-year residents assigned to one ward at the Massachusetts Mental Health Center in Boston during 1967–68. Field methods were used to measure change and to observe the process of socialization, supplemented by observations covering all aspects of the residents' experience in the three major areas of learning and professional orientation—therapeutic management, psychotherapy, and diagnosis—except for therapeutic sessions with patients, which were strictly private.

The study described in detail the routines of resident life and analyzed the residents' own views of their changing experience as they became psychiatrists. Other major areas of emphasis were the settings in which residents learn diagnosis and the four linguistically and functionally distinct systems of diagnosis used in the hospital; how residents learn to manage patients under normal conditions and under conditions of mild and severe crises (such as suicide), including the structure of ward reports, case conferences, resident-staff interaction, and suicide reviews; supervision and the skills of psychotherapy; and the structural features of psychiatric socialization and initiation which strongly determine the "psychological" experience of the resident and the values he acquires.

Intense supervision of residents was judged to be the major agent of socialization. Each resident had seven supervisors for different aspects of his training. These supervisors not only offered a variety of professional models but were the sources from whom the resident learned a great range of possible approaches in therapeutic management, psychotherapy, and diagnosis.

The resident's individual experiences, attitudes, values, and ways of accounting to himself and others for his practice were largely shaped by the structure of the residency program, in the researcher's view. The structural features of the program largely determined what psychiatrists learned, he found.

2.3.06 UNIVERSITY OF CALIFORNIA, BERKELEY
BERKELEY, CALIF.

GRANT NO. 91-05-68-05

Doctoral Candidate: Ivan Hubert Light, Department of Sociology

Sponsor: Dr. Martin A. Trow

Dissertation: Sociological Aspects of Self-Employment and Social Welfare Among Chinese, Japanese, and Negroes in Northern, Urban Areas of the United States, 1900–1940

Abstract: Chinese Americans and Japanese Americans have been persistently overrepresented in small business and persistently underrepresented on public social welfare rolls. The situation of Negroes has been exactly the reverse. This study sought the reason for these opposite trends and the connection between small business and social welfare.

Structural comparison of the three groups was undertaken. Historical research using public records and secondary sources was supplemented by interviews with several minority group leaders.

All three of the minority groups studied were forced out of the general labor market by discrimination in various forms, resulting in employment in the lowest paid, most menial jobs and in poverty. The Chinese and Japanese Americans responded to this discrimination by establishing communities based primarily on extended kinship and regional origin and by driving toward self-employment through such institutions. The Negroes who immigrated to northern urban areas developed specialized, voluntary associations to perform business and welfare functions which, among the Chinese and Japanese Americans, were performed by the community. Negro voluntary associations were unable to develop the intensive internal solidarity typical of the regional and kinship groups of the Chinese and Japanese. Abstention from membership was greatest among the poorest stratum of urban blacks, and thus, social isolation was more characteristic of them than of the Chinese and Japanese Americans. That isolation contributed to high rates of welfare dependency among urban blacks and also inhibited the capacity of poor blacks to organize a small business sector.

2.3.07 UNIVERSITY OF CALIFORNIA, LOS ANGELES
LOS ANGELES, CALIF.

GRANT NO. 91-05-69-08

Doctoral Candidate: Dwayne Gene Schramm, School of Education

Sponsor: Dr. S. J. Wanous

Dissertation: A Study of the Older Woman Worker Who Has Attempted to Enter or Re-enter the White Collar Labor Force Through the Assistance of Community Training Programs in Clerical Occupations

Abstract: This study investigated six publicly supported clerical training programs in which women 35 years of age and over participated during 1967–68 in Fresno, Calif., to determine if the programs helped these women enter the white-collar labor force.

In the summer and fall of 1968, interviews with 58 of the 91 women who had been enrolled in the programs revealed that the typical enrollee was 44 years old, married, the mother of two or three children whose median age was 17, and a high school graduate. She had never held a clerical job but had worked steadily at some type of employment for at least a year.

Data obtained from teachers and administrators showed great variation in the length, purpose, and content of the programs, although the common prerequisite was merely "an interest in clerical work." Three programs provided training for specified occupations—office clerk, clerk-typist, and stenographer—while another stressed completion of high school and limited clerical training to courses on office machines and typing. A fifth provided training in a simulated office. The sixth was part of the junior college system and training ranged from taking one course to working toward a 2-year degree with a major in business. No program had special guidance or counseling sessions and most had no job placement service.

Although 49 of the 58 women interviewed believed all training they received was essential, only 22 felt nothing was lacking. Twenty-four believed they needed more time for training and 12 felt training lacked adequate counseling or instruction in particular skills.

At the time of the interviews, 16 women were employed in clerical jobs and 10 in nonclerical jobs. Three-fourths of those with clerical jobs believed they could not have obtained them without the training. Of the 32 women who were not employed, almost half did not plan to look for work; the others were either planning to look for a clerical job or were undecided about seeking employment.

To strengthen the training programs, the researcher recommended: (1) Setting up counseling workshops; (2) forming an administrative body to integrate the various programs and eliminate duplication of effort; (3) issuing certificates of proficiency to qualified women; (4) recruiting women who are welfare recipients and from minority groups; (5) establishing job standards to be used as training objectives; and (6) increasing the amount of general education in the programs.

2.3.08 CLAREMONT GRADUATE SCHOOL
CLAREMONT, CALIF.

GRANT NO. 91–05–68–49

Doctoral Candidate: William H. Lawson, Department of Economics

Sponsor: Dr. Paul Sulton

Dissertation: Short-Term Manpower Projection Methods for Selected Services Industries in the Ventura County Standard Metropolitan Statistical Area

Abstract: The purpose of this study was to develop area manpower projections for specific occupations in service industries which could be used for better educational planning, counseling, and career guidance in community colleges. Four occupations (cosmetologist, barber, registered nurse, and licensed vocational nurse) were studied in the rapidly growing Ventura County, Calif., SMSA.

All identified employers of persons in the four selected occupations were asked to fill out a survey form. Returns from the survey and data from the California State Department of Human Resources Development and the 1960 Census were used to estimate the actual employment in the four occupations from 1965 through 1968. Seven manpower projection methods were then applied to determine the relative effectiveness of each, considering data barriers and limitations of methodology in projections for service industries.

The severe lack of sufficient data limited both the service occupations included and the variety of short-term manpower projection methods used in the study. However, these data barriers are common in all newly developing suburban SMSA's and therefore the resulting successful projection methods were considered applicable to educational planning. All projection methods met the criteria of "ease of use."

Four of the seven methods proved successful. They were: A single economic indicator; multiple linear regression; ratio analysis; and graphical extrapolation. Base periods of 3, 5, and 7 years were tested for each method, and the 5-year period proved most reliable for use in projections. The most important method for projection was that of the single economic indicator to determine the trend for each occupation. However, the best economic indicator varied by occupation. The three best economic indicators for all projection techniques were industry employment (at the 3-digit level of the Standard Industrial Classification), occupational employment, and total SMSA population.

Recommended procedures for using short-term projection methods were developed. It was concluded that there were appropriate methods for making such projections that can meet the needs of educational planning and instruction in a suburban SMSA experiencing rapid growth.

2.3.09 COLUMBIA UNIVERSITY
NEW YORK, N.Y.

GRANT NO. 91–34–66–37

Doctoral Candidate: Harold Oaklander, Graduate School of Business

Sponsor: Dr. Ivar E. Berg, Jr.

Dissertation: Some Unanticipated Effects of Advanced Education on a Critical Professional Manpower Resource, The Inservice Teacher

Abstract: This study analyzed the educational attainment of teachers in public elementary, junior, and senior high schools, with special reference to the nature of the relationship between educational attainment and job and career mobility. It used data from two 1962 studies—information on the career intentions of about 1,400 teachers in three eastern suburban school systems from a study by the Institute of Administrative Research, Teachers College, Columbia University, and information on the 1960–62 employment status of a nationwide sample of some 3,900 teachers from the post-censal survey of professional and technical manpower by the National Opinion Research Center for the National Science Foundation.

While different groups of teachers reacted differently to the attainment of higher levels of education, overall, advanced education increased both the desire and the decision to change jobs—either within the profession or to another occupation.

More than one-fourth of the teachers in the Columbia study desired a career change, divided about equally between those who wanted to leave education entirely and those who wanted other education jobs (e.g., guidance or supervisory work). Among the women, education was directly related to a desire for career change only among the older, the married, and the relatively small groups of junior high and senior high teachers. More of the men in all categories wished a change and the frequency of this desire rose with education. The men were generally much more prone to change occupation than were the women, although the more educated male teachers in senior high schools tended to remain in the profession.

Changes in employment status between 1960 and 1962 were much more frequent for women than men, with the preponderance of the female job changers leaving the labor force. More than 1 in 8 of the female teachers had done so, and there was an inverse relationship between the level of education and the proportion leaving the labor force among those over the age of 35. Among teachers who remained in the labor force, 10 percent of the men shifted jobs—about twice the rate for women. In changes from public school teaching to employment in the private sector, turnover was directly related to the level of education, again with the exception of male high school teachers.

The study emphasized that teacher mobility is much more complex than the commonly accepted picture of young women with little experience leaving the profession and the labor force to marry and raise families. Sizable numbers of teachers, at all ages and all levels of experience, leave their jobs each year for various complicated reasons. Thus, the mechanical response of educational administrators—searching for replacements—was judged to be inadequate.

2.3.10 COLUMBIA UNIVERSITY
NEW YORK, N.Y.

GRANT NO. 91-34-67-44

Doctoral Candidate: Thomas Frederick Wilson, Department of Economics

Sponsor: Dr. Jacob Mincer

Dissertation: Labor Force Participation and Business Fluctuations: An Analysis by Cyclical Stages

Abstract: This study focused on the timing of labor force entry and withdrawal over the course of the business cycle. It analyzed the rates of labor force participation in the various cyclical stages for the entire working age population and for major age-sex groups for the period 1948–67. Published data from the decennial census and the Department of Labor were used, with other research on the subject.

The amplitude of cyclical swings in the overall labor force participation rate appeared more moderate than commonly accepted, after the data were adjusted for the impact of measurement errors and noncylical factors. In the postwar years, it appeared, a cyclical increase (decrease) of 100 in employment was accompanied by an increase (decrease) of approximately 20 in the labor force, roughly half the size of the typical, published magnitude.

Through the business cycle, changes in the size of the labor force (aside from those associated with population growth) appeared to be related to the magnitude of the change in employment and the severity of unemployment. At the outset of an expansion in aggregate economic activity, the unemployment rate was reduced by rising employment and declining labor force participation. When the unemployment rate was high, therefore, some persons withdrew from the labor force while others postponed labor force entry. At the same time, the increasing employment absorbed persons actively looking for work. High and protracted unemployment appeared to lead increasing numbers of persons to remain outside the labor force, thus reducing its rate of growth. From the time when the overall unemployment rate dropped to roughly 5.5 percent to the peak of the business cycle, growth in the labor force seemed closely related to the growth in the rate of employment.

Contrary to the usual findings for age-sex groups, the study suggested that the participation rates of men 55 to 64 years of age and women 45 to 54 years of age behave according to the "additional-worker" hypothesis. There was some weak evidence suggesting that the participation rates of women 55 to 64 and 65 and over also move contracyclically. Another difference from other studies was that the participation rate of men 20 to 24 years of age did not respond to cyclical changes in the demand for labor. In agreement with published findings, participation rates of male teenagers and of women 16 to 44 years of age responded positively to cyclical fluctuations in the demand for labor, while the rate for men 25 to 54 years of age was not sensitive to the same variations.

As the economy passed from prosperity to recession, therefore, the composition of the labor force appeared to shift from relatively more younger persons to relatively more older persons.

2.3.11 THE FLORIDA STATE UNIVERSITY
TALLAHASSEE, FLA.

GRANT NO. 91–10–69–32

Doctoral Candidate: Raul Moncarz, Department of Economics

Sponsor: Dr. Irvin Sobel

Dissertation: A Study of the Effect of Environmental Change on Human Capital Among Selected Skilled Cubans

Abstract: This study analyzed the extent of utilization of the education and training of different groups of professional and skilled Cuban refugees who have entered the United States since January 1, 1959. It attempted to discover the occupational or personal characteristics of those refugees who adjusted best to the new environment and the barriers to occupational adjustment.

Data were obtained by questionnaires from 572 refugees who had been professional, white-collar, or skilled workers in Cuba. Interviews were held with Cuban occupational and professional associations in exile, as well as with representatives of U.S. professional associations.

About one-third of the refugees reported they were unable to make a good occupational adjustment. For some, differences between Cuban and American training and licensing requirements were found to be almost insurmountable barriers to adjustment. For others, occupational adjustment was hampered by the legal status of refugees, most of whom can become "permanent" immigrants (and ultimately citizens) only by securing an immigrant visa from an American consul in another country and reentering the United States under the immigrant quota. In still other cases, language was the major barrier. Finally, the lack of demand for workers in some occupations in Florida constituted a barrier for other refugees.

Adaptation was found to differ widely among the various professional occupations. Civil and electrical engineers reached the best adaptation, primarily because licensing was not of supreme importance in engineering. Language was the greatest difficulty engineers encountered. Because of professional restrictions, veterinarians encountered greater difficulty than any other professional group, but professional restrictions also proved almost insurmountable for optometrists, pharmacists, and dentists. Lawyers, architects, and physicians met great difficulties with licensing and professional restrictions.

Language proved to be the greatest barrier to occupational adjustment for teachers and accountants. Close to one-half of these teachers left the profession. Most accountants remained in the field, but in inferior positions.

Nurses and beauticians in large part remained in their fields, as did telephone workers, many of whom went to California. Age and professional restrictions effectively cut the airline pilots from their field of work.

2.3.12 FORDHAM UNIVERSITY
BRONX, N.Y.

GRANT NO. 91–34–68–58

Doctoral Candidate: Eleanor Meyer Rogg, Department of Sociology and Anthropology

Sponsor: Rev. Joseph P. Fitzpatrick, S.J.

Dissertation: The Occupational Adjustment of

Cuban Refugees in the West New York, New Jersey, Area

Abstract: One of the largest concentrations of Cuban refugees—outside of Miami—is in West New York, N.J. This study examined the occupational adjustment and cultural assimilation of these refugees, with emphasis on the role of the immigrant community in the process.

All available data on Cuban refugees in West New York (a city whose 1968 population of 35,000 was 27 percent Cuban) were assembled from public and private agency—school, church, housing, police, and welfare—records. About 250 Cuban heads of families were interviewed.

Most West New York Cuban refugees came from Havana and Las Villas, Cuba. A strong Cuban community had developed, with links to American society developing more slowly, primarily through work and school.

Relations between the Cuban community and the government of West New York had been good. Cubans were not overrepresented on relief rolls; their crime and juvenile delinquency rates were low; the school dropout rate had been low, with a higher rate of enrollment in high school and college for Cubans than for the West New York population as a whole. The influx of Cubans did not raise unemployment, and the rate of unemployment of Cuban refugees was below that for the area.

A major factor in the economic and social adjustment of the refugees had been the strength and solidarity of the Cuban community, whose members sought help from each other. It appeared, therefore, that a strong ethnic community, far from preventing assimilation, slowed it down to a manageable pace and in the long run worked toward the cultural assimilation of the group.

While little unemployment was found among West New York Cubans, most of the refugees had experienced downward occupational mobility in the United States. The higher the former socioeconomic status of the Cuban refugee, the less likely he was to have regained his former occupational level, indicating serious underutilization of Cuban training and skill. Only Cubans who had held low-level positions in Cuba experienced upward mobility, usually into operative jobs.

As socioeconomic status increased, the level of cultural assimilation increased. Cultural assimilation preceded occupational adjustment in the higher socioeconomic groups, while the reverse was true of the lower groups. As the refugee's occupational level advanced, his contacts with Americans increased, along with his facility in English. As the hope to return to Cuba faded, the refugee's links to American society increased, with 40 percent of the Cubans interviewed expressing the desire to become U.S. citizens.

2.3.13 GEORGIA STATE UNIVERSITY ATLANTA, GA.

GRANT NO. 91–11–70–16

Doctoral Candidate: Donald Paul Crane, School of Business Administration

Sponsor: Dr. Augustus E. Jordan

Dissertation: Qualifying the Negro for Professional Employment

Abstract: The primary purposes of this study were to compare white and Negro salaried employees in their career development and to describe specific company development programs for Negroes in Atlanta, Ga. The various techniques and programs used to employ, train, and promote Negroes and whites were studied, based on information obtained through interviews with the personnel officers of 25 companies and with 58 Negro salaried employees of these companies, their white counterparts, and their mutual supervisors.

The study found many differences in the way in which companies develop Negroes and whites for salaried positions. Current acceptance of Negro salaried employees by some of the companies was not complete. Different (and lower) standards of selection were generally used in hiring Negroes. Significant differences were found between the career development of Negro and white salaried employees. Formal company training programs included fewer Negro employees, and more whites were exposed to outside training; Negroes received fewer promotions and were more likely to leave the company.

Numerous personnel difficulties were reported in the employment of Negro salaried employees—trouble in locating qualified workers, government investigation of claims of discrimination, the Negroes' unfavorable attitudes toward the company, and high turnover rates.

2.3.14 HARVARD UNIVERSITY
CAMBRIDGE, MASS.

GRANT NOS. 91–23–66–16
91–23–67–52

Doctoral Candidate: Llad Phillips, Department of Economics

Sponsor: Dr. John T. Dunlop

Dissertation: An Analysis of the Dynamics of Labor Turnover in United States Industry

Abstract: This study was concerned with establishing a framework for analyzing labor turnover as a component of employment change which could reflect changes in the employment and personnel policies of management and as an indication of local labor market conditions, labor mobility, and the efficiency of the firm, market, and labor allocation. It constructed and tested a dynamic model of gross labor flows, which would relate specifically the theory of the firm and the theory of labor markets to the hiring, discharge, layoff, and recall decisions of the firm and to the tenure decisions of the worker.

Information came from the Department of Labor's Bureau of Labor Statistics establishment data on labor turnover for the period 1950–66, BLS reports on industry wage structure, and the Department of Commerce Census of Manufactures. The predicted behavior of labor-turnover rates, deduced from the hypotheses concerning the behavior of management by means of the model, was tested empirically using various techniques that combined time-series and industrial cross-section analysis.

The adoption of pension and retirement plans and expenditures on private welfare plans tended to tie the worker to the firm; through the mid-1950's, employers took advantage of these ties to increase the use of layoff as a means of employment adjustment in response to seasonal and cyclical disturbances. The worker's ties to the firm tended to become stronger as private welfare expenditures by the firm became larger. However, they weakened as the fraction of gross payroll expended on private welfare rose, reflecting the desire of younger workers for money now instead of benefits.

The adoption of supplementary unemployment benefit programs in the mid-1950's may not have reduced the worker's ties to the firm, but it did reverse management's growing tendency to rely on layoffs as an adjustment mechanism. A reduction in layoff levels was also associated with collective bargaining provisions calling for specific employment practices such as a reduced workweek to cushion or avert threatened layoffs.

Labor turnover data for the period 1950–66 indicated clearly that the trends in layoff rates were a key to the explanation of the quantitative, and to a large extent the qualitative, movement of the entire structure of gross labor flows.

In the investigation of the problems analyzed in the study, the properties of the dynamic gross labor flow model were only partially explored. For example, no attempt was made to study how gross labor flow patterns varied for firms with different internal labor market structures.

From both logical and empirical analyses, the industrial structure of labor turnover at a given level of disaggregation—for example, the Standard Industrial Classification system 2-digit industry group—was found to be determined in part by the distribution of employment by area and by component industry. Labor turnover may vary greatly among the component industries within an industry group, as well as by area within a given industry.

The study pointed out the weaknesses of the present labor-turnover data.

2.3.15 IOWA STATE UNIVERSITY OF SCIENCE AND TECHNOLOGY
AMES, IOWA

GRANT NO. 91–17–69–36

Doctoral Candidate: Catherine A. Palomba, Department of Economics

Sponsor: Dr. Edward B. Jakubauskas

Dissertation: Occupational Requirements for Iowa, 1975

Abstract: This study developed projections of occupational manpower requirements for Iowa for 1975 and estimates of the State's future labor force to provide data needed for planning education and training programs. Using the 1960 Iowa census data as a starting point, a matrix of 165 occupations and 64 industries was developed. National occupation-industry projections developed by the Bureau of Labor Statistics (see **3.1.64**) were also used extensively to put the Iowa projections in the context of national economic and technological developments. Data were also taken from the U.S. Office of Education and Iowa school records.

Considering the occupational structure of employment requirements as a whole, the study indicated that the professional, clerical, and service occupations would increase their share of employment requirements relative to other nonfarm occupations. Several growth occupations were identifed, particularly in the professional and craft groups. Estimates of replacement needs by occupation were included.

Comparing employment requirements with people available for employment, when adjustment was made for unemployment and dual jobholding, the researcher noted that rather large shortages of management and craft personnel as well as professional and service employees could be expected, with an oversupply of workers in unskilled labor, farm, and operative jobs.

When the educational attainment of the labor force was compared with the educational requirements for projected jobs, it was found that the general level of education would be more than adequate.

The researcher noted that the projections of both requirements and supply might have been improved if current occupational data for the State had been available.

2.3.16 THE JOHNS HOPKINS UNIVERSITY
BALTIMORE, MD.

GRANT NO. 91-22-68-23

Doctoral Candidate: Samuel Gubins, Department of Political Economy

Sponsor: Dr. Edwin Mills

Dissertation: The Impact of Age and Education on the Effectiveness of Training: A Benefit-Cost Analysis

Abstract: This study investigated the effects on the costs and benefits of institutional skill training of (1) the changing clientele (from the technologically displaced to the hard-core unemployed) and (2) the age and previous educational attainment of trainees. The benefit-cost analysis was set in the framework of the economic theories of unemployment and investment in human resources.

A sample of 150 trainees and a control group of 150 persons not in training were selected from applicants for institutional training projects scheduled to take place in 1966 in Baltimore. The control group was chosen from those who either had not enrolled or had dropped out after enrollment. Interviews were held with 108 members of the two groups in the summer of 1968, 18 months after completion of the training programs.

The analysis revealed: MDTA training continued to be economically efficient despite the change in clientele: for trainees with less than 9 years of schooling there were significantly higher payoffs than for those with more education, indicating that the basic education component of the training programs might have been the most valuable element in the program; the payoffs to the economy from training were consistently greater for youth (age 16 to 21) than for those 22 years and over; and training was financially worthwhile for all trainees.

2.3.17 THE UNIVERSITY OF KENTUCKY RESEARCH FOUNDATION
LEXINGTON, KY.

GRANT NO. 91-19-68-60

Doctoral Candidate: Brian Scott Rungeling, Department of Economics

Sponsor: Dr. F. Ray Marshall

Dissertation: Impact of the Mexican Alien Commuter on the Apparel Industry of El Paso, Texas (A Case Study)

Abstract: Large numbers of Mexicans live across the border and commute to El Paso, Tex., for work in the apparel industry (predominantly work clothing factories). This study explored the effect of those commuters on wages and employment, the location of the industry in the United States, and the probable effects of closing the border to the commuters.

All employers (20) in the industry in El Paso and selected workers (190) were interviewed on hiring policies, wages, training, and other work conditions. The apparel industry is the largest civilian employer in El Paso. In August 1968 it employed some 12,000 persons, of whom 23 to 40 percent were alien commuters living in Juarez, Mexico.

Both employers and employees indicated that commuters were not treated differently than other Mexican Americans in the job environment. This did not mean, however, that those with Spanish surnames, whether resident in Mexico or the United States, were not discriminated against relative to Anglos, the researcher observed. He found that their advancement opportunities appeared to be limited by language difficulties, as well as by the industry's skill structure and employers' reluctance to use women in management positions.

Wages were found to be the same for commuters as for other workers in the industry. Commuters were found to depress wages only to the extent that they augmented the area's large pool of unskilled workers. However, wages in the industry were lower in El Paso than they were in other cities in Texas and elsewhere in the United States. Yet, because of lower living costs in Mexico, the commuter generally had a higher real wage (for the same work) than the U.S. worker in the industry.

The commuters did occupy jobs that unemployed U.S. citizens were willing and able to perform, in the researcher's opinion. The commuters were judged to affect the location of the industry only insofar as they were part of the large supply of low-cost unskilled labor. Employers generally expressed reluctance to relocate in Mexico as long as the present status of the supply of labor continues, but many indicated they would move across the border if it were closed to commuters.

After examining the possibilities of increasing employment opportunities and wages in the area, the researcher concluded that although certain local initiatives could help expand demand, border-area problems were essentially national.

2.3.18 MASSACHUSETTS INSTITUTE OF TECHNOLOGY
CAMBRIDGE, MASS.

GRANT NO. 91-23-68-77

Doctoral Candidate: Robert Irving Lerman, Department of Economics

Sponsor: Dr. Michael Piore

Dissertation: An Analysis of Youth Labor Force Participation, School Activity, and Employment Rates

Abstract: This study examined factors affecting labor force participation, school attendance, and employment rates of 16- to 21-year-old youth living in the 96 largest standard metropolitan statistical areas (SMSA's) in March 1967. The major source of data was the March 1967 Current Population Survey (CPS), which contained records of some 14,000 individuals in the selected age group. The addition of special data which combined individual, family, and area information allowed new tests of a number of hypotheses.

Among the hypotheses tested were the so-called discouraged worker and added worker hypotheses. Discouragement effects on labor force participation were observed in the differences in area unemployment rates and the employment changes between areas with poor employment conditions and other areas, but not within the good to medium range of area conditions. The effect of area conditions differed substantially between students and nonstudents and between graduates and nongraduates of high school, but not by race or residence in a poverty tract. Differentials in participation rates for these latter two variables—though not the rates themselves—were fairly uniform regardless of local conditions. While added worker effects were not significant for youth as a whole, they appeared important to Negro students and low-income nonstudents. Family income in 1966 was only slightly related to labor force participation in March 1967 but had a pronounced negative impact on hours worked in 1966.

High unemployment rates and low SMSA wages encouraged high levels of school attendance, with the same nonlinear pattern found for discouragement effects. Residence in poverty tracts reduced school activity directly, but being black did not until allowance was made for the effects of blacks' lower labor force participation rates.

Employment rates were not significantly affected by age differences in the 16-to-21 age range, per se, but were influenced by factors associated with age, such as experience and family status. Nor were the rates highly sensitive to differences in conditions among the areas studied, again with the exception of the areas where unemployment was highest.

Race was a major factor affecting youth employment chances, even after controlling for the effects of many individual and area variables. However, high school graduation and previous work experience, especially in a relatively high-skilled job, benefited young Negroes as much as or more than young whites. Family income was found to be relatively unimportant, but family heads in occupations with hiring power were able to improve significantly the employment chances of their children. Poverty tract residence reduced youth employment rates more sharply for Negroes than for whites. Being a member of a family headed by a woman reduced employment rates for Negro youth but not for whites. Negro youth in general showed greater sensitivity than white youth to family variables.

In his concluding chapter, the researcher examined inconsistencies between his findings and those of other studies of youth employment problems and the policy implications of his study.

2.3.19 MASSACHUSETTS INSTITUTE OF TECHNOLOGY

CAMBRIDGE, MASS.

GRANT NO. 91–23–69–39

Doctoral Candidate: Vernon Renshaw, Department of Economics

Sponsor: Dr. Jerome Rothenberg

Dissertation: The Role of Migration in Labor Market Adjustment

Abstract: This study analyzed the relationship between gross migration flows and the availability of jobs to find out if the expected negative relationship between out-migration and the level of economic opportunities—which is not observed in cross-section analyses—could be detected when structural and trend differences in population mobility characteristics were controlled.

Data were compiled in the U.S. Department of Commerce, Office of Business Economics, from a 1-percent Social Security Sample File for the period 1960–65. These data provided, for 16 age-sex-race groups in 224 standard metropolitan statistical areas, information on annual changes in employment and the number of workers who, during the preceding year, had entered or left the area's work force as well as whether they had done so incident to migration. Structural variables were defined by the size and growth rate of the labor market, the proportion of workers who were white men ages 25 to 64, average yearly wage earnings, mean January temperature, median education level of the population over 25, and percent of possible sunshine.

These data were used to test two hypotheses: (1) That trend rates in both in- and out-migration may be higher in rapidly growing areas than in other areas because of structural differences in mobility related to growth rates, but that workers respond to deviations from the growth trend in the normal manner; and (2) that an initial increment in the net supply of job vacancies stimulates labor market activity and thus induces greater turnover and gross migration flows in the short run.

It was found that allowance for structural factors led to a significant negative relationship between out-migration and employment change, but it did not lead to symmetry in the effects of employment opportunities on in- and out-migration. It appeared that a metropolitan area must have a growth rate considerably below average before a given increment in employment change will have a greater marginal effect on out-migration than on in-migration.

The data would seem to rule out a simple migration wage mechanism as the dominant migration force in the short run. Relatively large short-run gross migration flows occurred with quite small net geographic movements of workers. Furthermore, short-run employment change appeared, if anything, to be negatively related to wage levels, and differences in wage levels among areas seemed to persist in the face of large gross movements of workers. Furthermore, short-run employment change appeared, if anything, to be negatively related to wage levels, and differences in wage levels among areas seemed to persist in the face of large gross movements of workers. Thus it would appear that, although large numbers of workers were willing to move from nearly any area, workers were not necessarily willing or able to move to high-wage areas in sufficient numbers to reduce wage differentials.

In addition to wage factors, the elasticity of labor supply might differ among areas because, in comparison with other areas, some might have better developed information links needed to attract migrants, more readily available amenities, and offer a wider variety of options in labor and other markets, such as housing. While the importance of such labor supply conditions in the determination of short-run employment change is difficult to measure, the lack of correlation between year-to-year employment changes for metropolitan areas would suggest that volatile labor demand conditions may be a more important influence on short-run employment change than are systematic, structural supply factors such as wage rates and sunshine.

2.3.20 MICHIGAN STATE UNIVERSITY EAST LANSING, MICH.

GRANT NO. 91–24–68–01

Doctoral Candidate: John D. Mason, Department of Economics

Sponsor: Dr. Jack Steiber, Department of Economics

Dissertation: The Aftermath of the Bracero: A Study of the Economic Impact on the Agricultural Hired Labor Market of Michigan from the Termination of Public Law 78

Abstract: At the end of 1964, the agreement with Mexico for bringing agricultural labor (braceros) into the United States came to an end. This study appraises the impact of that termination upon Michigan's agricultural economy and on wages, unemployment, and working conditions for domestic hired farmworkers.

Since Michigan growers of cucumbers for pickling were the largest source of employment of braceros in the State, they were sent questionnaires asking for information on wages, employment practices, extent of mechanical harvesting, costs, and returns. Replies came from employers representing about 20 percent of planted acreage. Agricultural and labor officials, growers, and pickle industry personnel were interviewed, and use was made of data on wages and other conditions of employment collected by various State and Federal agencies.

The acreage devoted to pickle-cucumber growing declined slightly in 1965, and a labor shortage developed, largely because the growers had not yet organized their recruiting activities. No shortages were experienced in the following years, conclusively negating the common belief that domestic agricultural workers would not perform "stoop" labor.

Wages were significantly increased after 1965 for all hired agricultural labor in Michigan, and other conditions of employment—such as housing and health care—improved noticeably. While acreage in pickle-cucumbers declined slightly again in 1966, the 1967 acreage increased to the level of the years before 1965. The use of mechanical pickers—long in the process of development—increased, and the rate of acreage transferred to Southern States rose slowly—a trend in evidence for a number of years.

Relative costs of bracero and domestic labor were found to have been fairly similar in periods of scarce labor supply, but when labor was abundant the costs for bracero labor were higher.

2.3.21 MICHIGAN STATE UNIVERSITY EAST LANSING, MICH.

GRANT NO. 91–24–68–22

Doctoral Candidate: Leonard Lieberman, Department of Sociology

Sponsor: Dr. James B. McKee

Dissertation: Labor Force Mobility in the Underclass: Opportunities, Subculture and Training Among Chippewa and Poor White

Abstract: This study explored the ways in which the movement of people out of poverty into the working class is affected by the interaction of job opportunities, family background, and training. Participants in an MDTA-financed experimental training project in Mt. Pleasant, Mich. (37 Chippewa Indians, 113 whites, and 15 Mexican Americans and Negroes) were observed during training and interviewed early in the course and about a year later. Supplemental data were obtained from employers of the trainees and training records.

After training, the trainees fell about equally into low, medium, and high labor mobility classifications. These classes were based on a 6-point scale (from 0 through 5), which assigned 1 point each to getting a job of higher socioeconomic prestige, increasing annual earnings by $300, maintaining or increasing annual income above the poverty line, increasing the proportion of time worked, and working at least 8 months at a given job.

Ethnic differences in family background and structure had the least effect on mobility Their influence operated through kinfolk's support of or opposition to mobility and the education-work models provided by other family members. The influence of family factors was negative almost as often as positive, generally giving low support to labor force mobility but becoming somewhat more favorable after training, especially for whites and Mexican Americans.

Training affected mobility more than family factors. The influence of the training center was found to be not so much in skill training as in the interpersonal influences of peers and staff members, increase in self-confidence among trainees, and placement of trainees in jobs when they completed training. However, continual association with peers at the training center, especially for the Chippewas, was likely to result in lower labor force mobility.

The greatest influence on mobility came from job opportunities. The range of opportunities which trainees defined as desirable was sharply limited by their social origins and only moderately higher than their previous work experience. Both their aspirations and the training courses perforce reflected the nature of the local economy, which was characterized by small cities, low industrialization, high out-migration, and a concentration of employment in such public agencies as a State university. The occupations in which they were trained were janitorial-maintenance, food service, cooking, auto mechanics, machine operation, welding, and clerical. Thus, although workers' ratings of the jobs they found in terms of pay, job satisfaction, and job status were closely and positively associated with their mobility, the opportunities actually available were so limited and so poorly rewarding that, even after training, the majority of the trainees were still poor and alienated.

Hence, the researcher concluded that, when job opportunities are maximized in conjunction with training centers of the type studied, the families of trainees may respond more strongly to upward labor mobility.

2.3.22 THE UNIVERSITY OF MICHIGAN ANN ARBOR, MICH.

GRANT NO. 91–24–68–75

Doctoral Candidate: Larry Bruce Sawers, Department of Economics

Sponsor: Dr. Louis A. Ferman

Dissertation: The Labor Force Participation of the Urban Poor

Abstract: This study investigated differences in patterns of labor force participation among the urban poor, including whites, blacks, Puerto Ricans, and Mexican Americans *of the same age, sex, and marital status*, and explored the extent to which these differences reflect variations in educational attainment and geographic distribution.

Little difference in patterns of labor force participation was found between white and black married men, but Mexican American men were somewhat more likely to be in the labor force than white men. Among unmarried men, blacks were slightly less likely to participate than the others. Participation by Puerto Rican men appeared to roughly parallel that by comparable white men.

Differences were much more marked for women than for men. Black and Mexican American married women over 30, especially those with preschool children, and to a lesser extent Puerto Rican women in their prime working ages, were much more likely to participate in the labor force than white women. Compared with their white counterparts, participation rates were much lower for young single black women and older Puerto Rican and Mexican American women.

With minor exceptions, the differences in labor force participation for the various groups were apparently unrelated to their geographic distribution. It was found that the urban poor lived in labor markets which on the average were quite similar, although Mexican Americans lived under slightly less favorable circumstances. However, the level and structure of labor demand in the area affected participation by groups of the poor differentially. For example, participation rates of the young and the old were more sensitive to labor demand than were those of the middle-aged group in all four racial and ethnic subgroups, while a strong local demand for low-skilled workers, measured by several indexes developed in the research, favored the participation of certain racial and ethnic groups.

Puerto Ricans and Mexican Americans were the least educated and whites were the best educated, with blacks occupying an intermediate position. Although the data were not ideal for the purpose, they indicated that differences in educational attainment could explain much of the differences in participation among the subgroups of the poor except for black married women, Puerto Rican women of prime working age, and possibly Mexican American men.

In summary, "a discouragingly small portion" of the differences in labor force participation between the racial and ethnic subgroups of the urban poor was explained by differences in educational attainment and geographic distribution. The several subgroups appeared to respond to education and to the local economic environment with different intensities or in different ways. Hence, the researcher concluded that the labor force participation of the poor was heterogeneous in several respects, but that much of this heterogeneity was still a mystery.

2.3.23 THE UNIVERSITY OF MICHIGAN
ANN ARBOR, MICH.

GRANT NO. 91-24-69-13

Doctoral Candidate: David Lee Featherman, Population Studies Center

Sponsor: Dr. Otis Dudley Duncan

Dissertation: The Socioeconomic Achievement of White Married Males in the United States, 1957–67

Abstract: This study of occupational and social mobility investigated the social and psychological factors that enter into the process by which men achieve their occupational and economic status. Data for the study were drawn from a Princeton University study of fertility spanning a 7- to 10-year period beginning in 1957. They relate to 715 white married men who, in 1957, were the fathers of two children, had an average age of 29, and lived in seven of the largest metropolitan areas.

In general, the men experienced upward occupational mobility in their own careers, much of it in line with regular increases in occupational experience and age, and in comparison with their fathers' occupations. The sons of craftsmen and salesmen were early and extensive participants in this upward trend: One-fourth and one-fifth, respectively, of these men were in professional or managerial occupations at the time of marriage and about 15 years later these proportions had risen to two-fifths and three-fourths. In both inter- and intragenerational mobility, clerical occupations were an important "staging area" for the flow between white- and blue-collar occupations.

Like other studies, this study found that social origins (measured by father's occupation, farm or rural influences, and number of siblings) affect a man's occupational career primarily in an indirect manner through the amount of education his family can provide. Education had its greatest influence on occupational achievement early in the career, while its greatest influence on income came near the end of the followup period.

Unlike other studies, however, this study found that the father's occupation had a direct impact on the son's occupational status in the middle years of his career. This effect could not be explained by the degree of occupational inheritance (where the son follows his father's occupation) nor by two measures of motivation (primary work orientation and materialistic orientation). The motivational factors did, however, have some value for predicting mobility during the study period.

Education, rather than motivation, was the key explanation for differences in socioeconomic achievement for various ethnic and religious groups. Men of British, French, and Scandinavian origin achieved the highest socioeconomic status; those of Latin American, Italian, and Irish ancestry had the lowest status, far below average. Jews of all ethnic backgrounds and Anglo Saxon Protestants had relative advantages over other Protestants and over Catholics, whereas Italian and Mexican American Catholics had the lowest socioeconomic achievements. Therefore, the researcher suggested, any conclusions that motivation is the key to differential social mobility for white American men must await further research.

2.3.24 THE UNIVERSITY OF MICHIGAN
ANN ARBOR, MICH.

GRANT NO. 91–24–69–14

Doctoral Candidate: John S. Chase, Center for the Study of Higher Education

Sponsor: Dr. James L. Miller, Jr.

Dissertation: The Contribution of Education to Economic Growth in the State of Michigan

Abstract: This study examined the migration patterns of persons earning degrees in business administration, education, engineering, medicine, law, and social sciences from six public colleges and universities in Michigan. Approximately 4,700 persons who earned their degrees in 1951–52, 1956–57, and 1961–62 were queried by questionnaire, and about 46 percent responded. In addition, field interviews were arranged with a number of respondents.

Migration patterns differed widely by field of study and by institution. Overall, nearly two-thirds of the graduates took their first jobs in Michigan. An overwhelming majority of the graduates of the teacher-training institutions remained in the State for their first job, as did a major portion of the graduates of the urban university (Wayne State). Only about one-half of the persons receiving degrees from the University of Michigan and one-third from the technological university remained in the State to work. A much smaller proportion of the doctoral recipients worked in the State than did those who earned a bachelor's or master's degree.

In all the years following graduation, from one-sixth to one-third of the in-State students, and from two-thirds to three-fourths of the out-of-State graduates had never worked in the State. Once employed within Michigan, however, sizable numbers of both in- and out-of-State graduates had spent their entire working careers in the State.

Ability to find a satisfactory job was the most important reason for remaining in the State, both by those who preferred to remain and those who wanted to go to other areas. Desire to remain near the family was the second most important reason given by those who preferred to remain in Michigan.

Michigan is highly industrialized and a leader in the field of education. But its industrial base has remained heavily oriented to durable goods industries, so that its economy is extremely sensitive to business cycles. And for a number of years, it has been losing more of its highly educated workers to other States than it was gaining from them, and gaining more of the lower skilled and lower educated workers than it was losing. From the study, it appeared clear that broadened employment opportunities are required if the State is going to retain its college and university graduates, who could in turn provide a highly skilled manpower pool for economic expansion.

The study had sought to assess the nature and extent of the contribution of education to the State's economic growth. This effort met insurmountable difficulties in the lack of available data and a satisfactory methodology.

2.3.25 NEW YORK UNIVERSITY
NEW YORK, N.Y.

GRANT NO. 91–34–69–23

Doctoral Candidate: Harold G. Kaufman, Department of Psychology

Sponsor: Dr. Raymond A. Katzell

Dissertation: Work Environment, Personal Characteristics and Obsolescence of Engineers

Abstract: This study investigated how the personal characteristics of engineers at the outset of their careers, as well as the nature of their early work assignments, influenced technical obsolescence later in their careers.

Data were drawn from a study made in the mid-1950's by the Educational Testing Service, Princeton, N.J., of the knowledge, theoretical interests, and first jobs of newly hired, recently graduated engineers. The present study used personnel records of a sample of 110 of those engineers to follow the subsequent job environments and job performances of the engineers during the intervening 14 years.

The amount of engineering knowledge the newly hired men had acquired, primarily during undergraduate training, had significant positive correlation with continuing graduate education, output of papers and patent disclosures throughout their careers, and their current, basic technical competence.

A challenging early work environment also stimulated continuing graduate education, good job performance, and the output of papers and patents. Participation in graduate engineering education had progressively increasing and pervasive influence on all aspects of technical effectiveness during the engineers' careers. Participation in short in-company courses was greater among engineers who had lower initial knowledge and early work challenge, as well as among those who were less technically effective. The in-company courses apparently did not result in improvement of subsequent technical effectiveness.

These results suggest that engineers who are assigned to more technically challenging work activities utilize their engineering knowledge and skills, thereby stimulating good job performance as well as the maintenance of their technical currency. Therefore, the researcher concluded that a potentially fruitful approach to the problem of obsolescence would be to effect changes in job design, capitalizing on the intrinsic challenge of the work itself to stimulate engineers to keep technically up to date.

2.3.26 NORTHWESTERN UNIVERSITY
EVANSTON, ILL.

GRANT NO. 91-15-69-40

Doctoral Candidate: Ronald Gordon Ehrenberg, Department of Economics

Sponsor: Dr. George E. Delehanty

Dissertation: The Short-Run Employment Decision and Overtime Behavior in U.S. Industry, 1966

Abstract: This study tested the hypothesis that high quasi-fixed supplementary compensation costs per man, relative to the overtime wage rate, tend to induce a substitution of overtime hours for increased employment. Unpublished data from the Bureau of Labor Statistics survey of 3,665 manufacturing and nonmanufacturing establishments on "Employer Expenditures for Selected Compensation Practices, 1966" were used. Only regularly scheduled overtime was considered, and only production workers in manufacturing and nonsupervisory workers in nonmanufacturing were included.

Models were constructed of the firm's short-run demand for workers and hours to be used as a framework in which to test, empirically, the above hypothesis and ascertain other determinants of intraindustry cross-section variations in overtime hours per man. Among the conclusions reached was refutation of the commonly accepted notion that a randomly fluctuating absentee rate will always lead to an increase in overtime above the level that would prevail in a certainty-equivalent absentee rate case. A justification was provided for the familiar phenomenon that not all employees of a given firm work the same number of hours. The conditions under which it would be rational for management to agree to union demands that overtime be assigned on the basis of seniority were indicated.

In a vast majority of industries, the study concluded, annual scheduled overtime hours per man were positively related to the ratio of weekly quasi-fixed labor costs per man to the overtime premium rate. Within many industry groups, however, the degree and significance of the relationship appeared to vary across different establishment class sizes and different component industries.

Estimates of the impact of increases in the overtime premiums from one-and-one-half to two times the straight-time hourly wage on overtime hours and the level of employment were presented. In the majority of the industries—assuming all other conditions remained unchanged—the resulting gain in full-time employment opportunities would have been on the order of 1 to 3 percent in 1966. However, since other conditions would clearly not remain unchanged, the conclusion was that increasing the overtime premium would apparently not have been an effective method of decreasing unemployment. If further research, based perhaps on a similar 1968 survey by the Bureau of Labor Statistics, should indicate greater uniformity in the ratio of fixed costs to overtime rates across different sizes of establishments within an industry, the conclusion might be different for a noninflationary period.

2.3.27 SYRACUSE UNIVERSITY
SYRACUSE, N.Y.

GRANT NO. 91-34-68-03

Doctoral Candidate: Bernard Daniel Rostker, Department of Economics

Sponsor: Dr. Jerry Miner

Dissertation: Manpower Theory and Policy and the Residual Occupational Elasticity of Substitution

Abstract: This study, by developing the short-run policy implications of a structurally disaggregated labor market, analyzed the extent to which fiscal and manpower policies may be complementary, competitive means used to foster the goals of the Employment Act of 1946—minimum unemployment and price stability.

The 1960 Census of Population provided the employment and wage data used in the study. Value-added data were from the 1958 and 1963 Census of Manufactures. Basic employment data consisted of an industry-employment matrix for 37 standard metropolitan statistical areas. Value-added data were secured for nine two-digit Standard Industrial Classification industries, each divided into 10 occupational groups.

As the economy expands, not all occupations reach full employment at the same level of output, with resulting occupational shortages in some occupations. According to neoclassical theory, such occupational shortages could be eliminated through factor substitution resulting from a change in relative wage rates. If wage changes are prevented, shortages may persist and may result in production bottlenecks and inflation. A possible nonmarket means to eliminate occupational shortages—manpower training—does not require alteration of the relative wage structure.

The degree to which fiscal and manpower policies might be coordinated is an important question. Since the elasticity of substitution measures the responsiveness of changes in factor proportions to changes in relative wage rates, the complementarity of these policies is a function of the magnitude of the elasticity of substitution.

Until 1961, measures of the elasticity of substitution were difficult to obtain. In that year a new production function, the CES (constant elasticity of substitution), was developed, in which elasticity of substitution could be estimated with data from only one of two factors in production. Since the second factor is not explicitly considered, it must be assumed that the measured elasticity is a "residual" elasticity of substitution (RES). Assuming that aggregated production can be represented by a production function of the CES form, the smaller the residual elasticity of substitution of the scarcest occupation, the greater the amount of relative wage change needed to alter the least cost factor mix, and thus, the greater the possible need to coordinate policies.

The estimates developed indicated that there may be a scarcity of workers in occupations with low estimates of elasticity. Use of a nonmarket mechanism would, therefore, appear necessary to achieve full employment with stable prices. Successful training, which moves workers from overcrowded occupations into those in which a scarcity of workers exists, would appear to be such a mechanism. Since manpower training does not, however, in itself create jobs, the effectiveness of training depends on maintenance of an adequate level of aggregate demand.

2.3.28 SYRACUSE UNIVERSITY SYRACUSE, N.Y.

GRANT NO. 91-34-68-42

Doctoral Candidate: Alan B. Kirschenbaum, Department of Sociology

Sponsor: Dr. William Pooler

Dissertation: Family Mobility: An Examination of Factors Affecting Migration

Abstract: The major purpose of this study was to test the proposition that increases in employment and employment-related factors would increase mobility. It also dealt with how such employment opportunities would influence a regional and metropolitan destination choice.

The data used were part of the 1/1,000 sample of the 1960 Census, containing separate records of individuals and their characteristics, as well as selected characteristics of the household of which each individual was a member. The sample was restricted to employed white male heads of households, who were married with spouse present and were between the ages of 14 and 64. It covered family heads residing in both metropolitan and nonmetropolitan areas in 1960 and used a 5-year migration period (1955-60).

Increases in employment opportunities did not directly correspond to increases in mobility. Instead, mobility was found to be linked to career cycle stages and conditions of economic distress. Those at the "trial" stage (a point of increasing opportunities) as well as those in a position of economic distress (with decreasing opportunities) were both highly mobile. Career stage changes were, however, of greater significance. The general location of opportunities affected the selectivity of urban and rural migrants with the skills of the migrant generally matching the available opportunities. A regional destination was also linked to the general economic conditions of the areas. A choice of a central city or suburban ring destination, however, was related to existing patterns of residential segregation within cities, tending toward an increased similarity between the population characteristics of the area and that of the migrant family.

With the likelihood of an upgrading in the occupational skill structure, thereby increasing career oriented jobs, the researcher concluded that mobility would probably increase. Unskilled workers were also regarded as likely to be highly mobile, but because of conditions of exaggerated economic distress related to their outdated skills. Given increased mobility among both groups and a tendency toward selecting an urban residential site on the basis of residential segregation, one can foresee increased physical and social isolation as well as increased visibility of social and class differences among urban dwellers.

2.3.29 TEXAS TECHNOLOGICAL COLLEGE LUBBOCK, TEX.

GRANT NO. 91-46-69-15

Doctoral Candidate: Richard C. Stapleton, School of Business Administration

Sponsor: Dr. Vincent P. Luchsinger

Dissertation: An Analysis of Rural Manpower Migration Patterns in the South Plains Region of Texas

Abstract: This study examined the migration patterns and occupational mobility of white male high school graduates (between 1953 and 1963) of four rural high schools in three counties in the South Texas Plains area.

Data were collected by mailed questionnaires from 236 of the high school graduates (out of a total of 410) from the four rural communities located within a distance 41 miles of the Lubbock standard metropolitan statistical area.

The agricultural situation in the three counties had deteriorated during the period covered by the survey. Prices declined, cotton acreages were decreased, fertilizer and other costs increased rapidly, and the region had slowly been depleting its reservoir of underground irrigation water. These conditions appeared to indicate clearly the need for most of the high school graduates of rural high schools to migrate to urban areas.

Almost three-quarters of the persons included in the study had migrated from their home communities and had not returned by the time of the survey. Of these, less than one-third were living in areas other than the South Plains region. Some 43 percent were residing in urban areas, and 28 percent lived in small towns and cities. Those living in urban areas had made an average of more than three moves. About 29 percent of the group were living in their home communities, and about half of these had migrated and returned.

Migration appeared to depend primarily on education and age. It was not apparently affected by family size or wealth, although migration was higher among those with more brothers. Sons of farmers migrated less than those of other rural workers. The persons who had received the most education moved to urban areas; those receiving the least education stayed in small towns. (Two-thirds of the men had college training, and 29 percent had received a degree.) The older graduates were more likely to reside in local areas in 1969 than the younger ones, who were more likely to be found in urban areas, indicating an increasing rate of migration in the past few years.

A relatively small spread appeared between the average income of those who migrated and those who did not. The difference was greater between those who were living within 200 miles of Lubbock and those who had migrated farther from their home communities. Average income of college graduates was considerably more than that reported by those with no college training.

Nearly three-fourths of the men's fathers had been farmers or farmworkers. At the time of the survey (6 to 16 years after graduation from high school) 35 percent of the men were blue-collar workers, 28 percent were white-collar workers, 11 percent were in professional and managerial positions, and 26 percent were farmers. Thus, mobility from agriculture appeared to be less extensive in this region than in the United States in general. This may reflect the fact that those who stayed in farming reported the highest average income of any occupational group.

By age 28 or 29, "equilibrium" appeared to have been reached by most of the persons surveyed. Most of the moving and changes began to slow down and to bring the movers closer to their home communities, and income increases began to taper off.

In general, the study concluded, the South Plains region of Texas appeared capable of supporting large numbers of rural migrants, offering economic opportunity equal to that found elsewhere in the country, except for college graduates. Rural migrants surveyed had achieved better education and higher incomes than rural migrants in general throughout the United States.

2.3.30 TEXAS TECHNOLOGICAL COLLEGE
LUBBOCK, TEX.

GRANT NO. 91–46–69–21

Doctoral Candidate: Albert S. King, School of Business Administration

Sponsor: Dr. Carlton Whitehead

Dissertation: Managerial Relations with Disadvantaged Work Groups: Supervisory Expectations of the Underprivileged Worker

Abstract: This study tested the hypothesis that new, disadvantaged workers would learn faster and work better if their supervisors expected them to do so. The test was conducted between February and July 1969 in five work-training situations: MDTA training courses for welders, auto mechanics, and presser machine operators; Neighborhood Youth Corps in-hospital training for nurse aides; and company vestibule training for electronic assemblers.

Supervisors were given instruction in their roles and were made aware of possible difficulties in overcoming absenteeism and tardiness, as well as in establishing accepted work habits. They were also told that 20 to 25 percent of the trainees in their class could be expected to do well because they had scored high on aptitude tests, although these trainees had actually been selected at random. Control groups were the remaining members of the training classes.

The designated trainees in the MDTA courses were superior on both objective measures of performance and supervisors' evaluations to members of the control groups. This was not the case with nurse aides and electronic assemblers, although there was some slight evidence of superior performance by the designated trainees on one or more performance measures.

Although the researcher recommended further study of the complex interactions by which higher supervisory expectations are translated into superior performance, he concluded that his findings have practical application in training programs.

2.3.31 THE UNIVERSITY OF TEXAS
AUSTIN, TEX.

GRANT NO. 91–46–68–24

Doctoral Candidate: John L. Iacobelli, Department of Economics

Sponsor: Dr. F. Ray Marshall

Dissertation: Training Programs of Private Industry in the Greater Cleveland Area

Abstract: This study obtained information on employers' training programs and their views on Government manpower training programs in interviews with 131 private and public employers in Cleveland.

Most of the employers trained only when forced to do so by an increase in business or by shortages of key skills, which they reported as pervasive in the 6 months preceding the survey. All but one of the employers said they had training programs, but only 1 in 8 had any extensive formal training and another 1 in 4 had some formal training. In the other cases, "training" consisted of informal on-the-job learning.

Less than three-fifths of the firms kept records of training activities and only one-fourth kept them separately from personnel and payroll records. Nevertheless, three-fourths said they were willing, with some conditions, to report on their training activities to the Government; those that did *not* do most of their own training had a strong desire for information about the supply of labor being trained in their immediate geographic area.

Generally, only firms with extensive formal training programs saw training as a means of increasing profits; the others saw it merely as another cost. Even so, most were willing to pay all or most of the costs of training "advantaged" labor for their specific needs when faced with skill shortages, for they felt they could justify the costs to stockholders. They were, however, convinced that they could not justify training the disadvantaged, particularly if the disadvantaged started at regular entry wages, because of their lower productivity and smaller potential for later promotion. Hence, they felt that the Federal Government should pay half to three-fourths of the cost of training disadvantaged workers. They tended to prefer—although not strongly—a direct subsidy, tax rebate, or wage supplement.

Even with Federal financial aid, however, a majority did not believe that their firms would do more to train the disadvantaged. The most common reason was that they had no more jobs for disadvantaged labor. Furthermore, only a small number believed that private industry was equipped to provide remedial training; the others would confine their training of the disadvantaged to the teaching of specific skills.

At the time of the survey, only one-fourth of the employers, predominantly large firms, were participating in Government manpower training, although over half had been contacted about such programs. Even those who had been contacted were poorly informed about the nature, scope, and availability of the training programs. Much of their participation in Government programs was marginal, such as hiring some graduates of a Government area manpower training program, and many participating employers were critical of the programs.

Based on the respective strengths and weaknesses of private and Government training programs, the researcher recommended that the Government, even while encouraging such efforts as the Job Opportunities in the Business Sector Program, should not expect employers to provide all the necessary jobs for disadvantaged workers, but should create jobs itself. At the same time, Government should specialize in teaching basic work attitudes, shifting most specific skill training to industry. To improve the planning of Government programs, the researcher also recommended that the Government experiment with collecting training reports from private industry on a geographic area basis, with the ultimate aim of developing a nationwide reporting system.

2.3.32 WASHINGTON UNIVERSITY
ST. LOUIS, MO.

GRANT NO. 91-27-69-10

Doctoral Candidate: Kenneth Edward Galchus, Department of Economics

Sponsor: Dr. Richard F. Muth

Dissertation: The Elasticity of Substitution of White for Nonwhite Labor

Abstract: This study attempted to determine the degree of elasticity between white labor and labor of other races within various occupational categories. The primary purpose of the study was to provide some evidence as to the extent of racial discrimination within the various occupations and the part discrimination plays in earnings differentials between white and minority group workers.

Data used were from the individual State reports of the 1960 Census of Population for male workers in 21 occupations and 58 standard metropolitan statistical areas (SMSA's). The variables considered were the white/other races ratios of median earnings, employment, educational attainment, median age, relative weeks worked, composition of the labor force, the population of the SMSA, and regional variance.

Differences in educational attainment explained the largest degree of interarea variation in the earnings ratio for all occupations. Educational differences were more significant for white-collar than for blue-collar occupations and had little influence on area differences in the earnings ratios in the lower skilled occupations.

The findings appeared to contradict the accepted idea that discrimination accounts for higher earnings differentials in the South. Overall, regional variance did not explain much of the variation in the earnings ratios, nor did differences in age or relative weeks worked. Part of the variance in the earnings ratios could be attributed not to the occupational composition of the work force but to the percentage of minority group members in the SMSA.

None of the evidence appeared to suggest that the elasticity of substitution between white and minority group workers, in the various occupational classifications surveyed, was anything but infinite, once quality differentials were removed. At the same time a white/minority group earnings differential still existed within most of the occupations included in the study. This differential may be due, the study concluded, either to a quality differential not being expressed in the education variable or to racial discrimination. But the researcher believed that the apparently prevalent practice of whites and minority group members working side by side would tend to eliminate discriminatory earnings differentials.

If, however, the disparity in earnings is due to discrimination, the implementation of Government policy should emphasize the employer's side in the hiring process. On the other hand, if quality differences prevent employers from paying whites and minority group workers the same wages, Government policy could be implemented by various types of Government-sponsored training programs. Because of the primary influence of education on earnings, the need for educational subsidies would appear obvious.

2.3.33 UNIVERSITY OF WASHINGTON
SEATTLE, WASH.

GRANT NO. 91–51–68–54

Doctoral Candidate: James David Gwartney, Department of Economics

Sponsor: Dr. Kenneth McCaffree

Dissertation: Income and Occupational Differences Between Whites and Nonwhites

Abstract: This study explored employment discrimination against minority group members from the standpoint of income and occupation. It estimated income differentials for whites and minority groups in 1959 resulting from factors other than discrimination and changes in the income differentials between 1939 and 1966 and measured some of the differences in the intensity of discrimination between public and private sectors of the economy.

Data were from decennial censuses, the Current Population Survey, and the U.S. Office of Education (principally the so-called Coleman report, *Equality of Educational Opportunity)*.

The median income for urban minority group men was 41.7 percent below that for white urban men in 1959. A large part (between two-fifths and two-thirds) of the differential was due to differences in productivity capacity—years of education, scholastic achievement, and concentration of Negroes and other races in the low-income South. After further adjustment for the differing distributions by age and city size, an unexplained income difference of 13 to 19 percent remained, assumed to be due to discrimination in one form or another. Comparable calculations for urban women showed that the five adjustment factors more than accounted for the income differential of 34 percent.

Relative income of male minority group workers increased significantly in the 1940's but little further change occurred through 1966, after adjustment for the migration of these men from the South to the higher income North. In contrast, the income of minority group women went up markedly relative to that of white women.

Discrimination was found to vary widely among occupational classifications, being most intense in the sales and managerial occupational groups and in skilled crafts. Men were much more subject to discrimination than were women; discrimination was more intense in the South than in the North for both men and women. Discrimination was noticeably less in government employment in both South and North than in the private sector. Minority group members were, however, strongly discriminated against in two government occupations—those of policeman and fireman.

2.3.34 WAYNE STATE UNIVERSITY
DETROIT, MICH.

GRANT NOS. 91–24–66–14
91–24–67–26
91–24–68–53

Doctoral Candidate: Stig Emil Ralstrom, Department of Industrial Education

Sponsor: Dr. G. Harold Silvius

Dissertation: Beliefs of Industrial Education Teachers Regarding Their Teaching Practices for Preventing Dropouts

Abstract: This study sought to identify, analyze, and evaluate teaching practices of senior high and industrial education teachers that have proved to be effective in preventing dropouts and to identify those negative practices which caused or might cause students to drop out of school. The relationship between the evaluation of teaching practices and such personal factors as age, experience, and preparation for teaching was examined.

With the assistance of administrators, teachers, and other educators throughout the United States, a list of 115 teaching practices (79 positive and 36 negative as they affected the dropout) was postulated. This list was submitted to industrial education teachers in the Detroit public schools, together with a questionnaire asking for information on such factors as age, experience, and training. A total of 143 (out of 178) teachers responded.

The replies of 25 inner-city teachers who had demonstrated "holding power" were compared with those of other inner- and outer-city teachers. Then the 25 with holding power were asked, in interviews, to evaluate and rank the selected teaching practices and to describe how they implemented positive teaching practices or overcame negative ones.

The three groups of teachers did not differ significantly in such areas as training experience or preparation for teaching. However, all of the outer-city teachers worked in comprehensive schools, while about a third of both inner-city groups were assigned to vocational schools. Reflecting this, a significantly higher proportion of inner-city teachers held vocational teaching certificates.

Marked differences were apparent between the teachers with holding power and the others concerning practices that could prevent dropouts. The other or "usual" teachers did not, however, agree among themselves as to what constituted the best positive teaching practices. There was general agreement among the teachers with holding power that positive teaching practices could be successfully implemented and the negative ones overcome in industrial education classrooms.

The top-ranking positive practices listed by the holding power teachers were: (1) Creating a learning climate where learners feel free to ask questions and exchange ideas; (2) making the learners conscious of their progress; (3) seeing to it that every learner enjoys occasional success; (4) indicating to the learner that you are friendly, sympathetic, and sincere; and (5) being positive and giving sincere praise to students. The leading negative practices were: (1) Taking the position that it is necessary to fail students to maintain standards; (2) ridiculing or embarrassing a student who has broken an established rule; (3) recognizing that a youth who makes low grades will probably become a disciplinary problem; (4) placing a youth in a situation where he feels ashamed, embarrassed, or ridiculous; and (5) permitting the viewpoints of other teachers to influence your opinion of a youth.

There was also general agreement among these teachers that current text books were not suitable for students likely to drop out of school, principally because of their reading difficulties—although easy-to-read-and-understand materials could be developed. They further agreed that industrial education courses should not be used as a "dumping ground" for maladjusted students. Counseling for such students should begin in elementary school and should stress courses and job opportunities open to them.

2.3.35 YALE UNIVERSITY
NEW HAVEN, CONN.

GRANT NO. 91–07–67–38

Doctoral Candidate: Barbara Holtz Kehrer, Department of Economics

Sponsor: Dr. Mark Leiserson

Dissertation: The Nursing Shortage and Public Policy: An Economic Analysis of the Demand for Hospital Nurses in Connecticut

Abstract: This study considered whether the Nurse Training Act of 1964, aimed at increasing the supply of registered nurses, can by itself overcome the shortage of nurses in view of the characteristics of the demand for nurses. It analyzed the demand for general staff nurses in Connecticut, using data collected through the Connecticut Hospital Association for the 35 short-term general hospitals in the State and through interviews with administrators and directors

of nursing in nearly all of the hospitals during the latter part of 1967.

Some administrators and directors perceived nurse shortages, others did not. These differential perceptions were not closely related to hospital size, wage level, or attainment of a standard nurse-bed ratio, but hospitals located in large urban high-income areas with other hospitals were more likely to report shortages than those in other areas. There was little evidence that the perception of shortages was directly related to changes in the utilization of different types of nursing personnel.

However, absolute and relative wage rates of nursing personnel had a direct effect on the frequency with which registered general staff nurses performed 15 nursing activities that could be delegated to less highly trained personnel. The more general staff nurses there were in a hospital relative to nursing personnel, the more frequently the nurses performed duties requiring a lower skill level, and the more ward clerks there were, the less the nurses performed these duties.

Two current efforts of the nurses' professional associations were seen as affecting both the effective demand for hospital nurses and their utilization: (1) attempts to raise members' pay through collective bargaining, and (2) proposals to increase the average length of nursing education from 3 to 4 or 5 years. Both of these efforts, if successful, would tend to raise pay scales for registered nurses relative to other nursing personnel. The hospital administrators and directors of nursing who were interviewed said that, although the number of budgeted positions for nursing personnel was relatively insensitive to small short-run increases in wage rates, substantial increases would lead to significant shifts in the utilization of resources. However, the researcher found that it might be necessary to provide incentives that would overcome the tendency of many nurses to retain old methods of doing things.

Unless such incentives can be provided and unless the prices of both nursing services and perhaps hospital care are permitted to rise, the researcher concluded, increasing the supply of registered nurses might have no impact upon the shortage of health workers of which the shortage of nurses must be viewed as an integral part.

2.4 PROJECTS COMPLETED, JULY 1, 1969–JUNE 30, 1970—
Research Project Grants Under the MDTA

2.4.01 THE INSTITUTE FOR CREATIVE STUDIES
WASHINGTON, D.C.

GRANT NO. 91–09–70–03

Principal Staff: William Carter, Joseph Eichenholz, Ellen Maycock, Dr. Anita B. Pfaff, and Dr. Martin Pfaff

Report Title: Public Transfer Payments and Labor Force Participation

Abstract: This study—a summer project by three university students under the direction of two professors—was directed toward statistical estimation and empirical explanation of the impact of certain transfer payments on the labor force participation of various components of the labor force. Time-series data were obtained from agencies administering government transfer payments, the U.S. Department of Labor's Bureau of Labor Statistics, and the Department of Commerce's Office of Business Economics and Bureau of the Census.

Transfer payments included in the analyses were social insurance; health and medical aid; public aid; veterans' payments; educational expenditures; public housing; and other welfare sources. Two time spans were covered—the period of the second quarter of 1950 to the third quarter of 1953, and that commencing in the fourth quarter of 1953 and ending in the fourth quarter of 1966.

The major emphasis of the study was on male labor force participation, which has been the most challenging as relatively little variance may be observed in the labor force participation of prime-age men. However, models of the labor-force participation of prime-age women and of the elderly were estimated for comparison.

Different classes of transfer payments were found to have a different impact on the various segments of the labor force. In general, however, public transfer payments appeared to have a positive effect on labor force participation of prime-age men—a finding contrary to the apparent disincentive effect noted by a number of scholars. This was because, the authors concluded, a set of transfer variables were substituted for the customary residual termed "nonwage income." Property income, for example, can be viewed as the result of a deferred-exchange transaction rather than a true indicator of the effect of transfer payments.

For women, public transfer payments tended to have a disincentive effect on participation in the labor market, although this was not clearly established. In the case of the elderly, the disincentive effect of transfer payments on work was clear.

The researchers warned that the results of the study, because of data limitations, must remain only suggestive. A complementary cross-sectional study might, they suggested, shed further light on the effects of transfer payments on various age and sex groups and on the effect that institutional characteristics together with transfer payments have on labor force participation.

2.4.02 MASSACHUSETTS INSTITUTE OF TECHNOLOGY
CAMBRIDGE, MASS.

GRANT NO. 91–23–67–41

Principal Staff: Dr. David P. Taylor and Dr. Michael J. Piore

Report Title: Federal Training Programs for Dispersed Employment Occupations

Abstract: This is a study of MDTA-financed training programs in the Boston area through 1968 for tool and die makers, offset printers, and restaurant cooks and chefs. The programs were sponsored by multiemployer organizations, reflecting the large number of small establishments in the industries that employ workers in these occupations.

The researchers hypothesized that, since an individual employer's labor needs are small in relation to the labor market for these occupations, he can meet his needs without training and that the difficulty of preventing pirating by his competitors also deters training. It was therefore thought that there would be a high payoff for federally sponsored training in such industries and that a study of the returns would serve as a benchmark against which to compare net contributions of government training in occupations less susceptible to measurement.

But the researchers found strong endogenous patterns of manpower training and use which made it impossible to assume that training offered by Federal programs made a net contribution. As in occupations with concentrated employment in industries with extensive internal labor markets, some employers organized training programs. Employer training took place largely in the production process through either a sequence of increasingly complex jobs or analogous task assignments. In some dispersed employment situations, however, the worker took the initiative, programing his own training by moving from job to job in search of new experience. This pattern predominated in cook-chef training. In industries that employ tool and die makers, the trainee-programed pattern coexisted with employer-organized training. The latter pattern predominated in printing.

To some extent the federally sponsored programs succumbed to the pressure to support the endogenous training patterns in the occupation studied and, to the extent that they did so, they were simply substitutes for training that would have been privately directed and financed.

Since it was not possible to say how much of a net contribution the MDTA programs made, the authors pursued an alternative approach, examining factors likely to lead the programs to resist or to accede to pressures to conform to the endogenous patterns and to complement them by extending the amount of training that these patterns provided.

It was found that the individuals and nongovernmental institutions participating in the training programs under study had no intrinsic interest in resisting pressure to support the endogenous training patterns; some were, in fact, themselves the source of this pressure.

The Federal agencies also failed to generate resistance to such pressure; they lacked objective criteria that effectively distinguished new training opportunities and strong review procedures for applying the criteria.

2.4.03 MASSACHUSETTS INSTITUTE OF TECHNOLOGY

CAMBRIDGE, MASS.

GRANT NO. 91-23-69-34

Principal Staff: Dr. Jon M. Shepard, Industrial Relations Section, Sloan School of Management

Report Title: Technology, Division of Labor and Alienation from Work

Abstract: This study addressed the question: Does a worker's unique relationship to technology engender in him a set of feelings about work which are distinguishable from others laboring under different man-machine relationships? It compares the results of the researcher's study of worker alienation among factory workers (see **3.5.23**) with his new findings for office workers. Both studies sampled man-machine relationships in three types of production systems: Nonmechanized, mechanized, and automated. In the factory study, these were represented by skilled maintenance workers in an auto plant, final assemblers in the same plant, and monitors of equipment in an oil refinery; in the office study, by workers performing traditional clerical duties, office-machine operators (both EDP-related machines and others), and computer operators, programers, and systems analysts—all selected from the home offices of five insurance companies and a large bank. From interviews with the workers, five scales were developed to measure alienation—powerlessness, meaninglessness, normlessness, self-evaluative involvement in work, and instrumental work orientation.

In the factory study, alienation reached a peak among final assemblers in the auto plant, was lower among the skilled maintenance workers, and, on all but the powerlessness scale, lower still among the monitors in the oil refinery.

Among office employees, programers, systems analysts, and computer operators scored lower than either nonmechanized or mechanized clerical workers on all measures of alienation except powerlessness, but the expected differences between the two groups of clerks were fairly consistently lacking.

The researcher concluded that technology in the office has not led to a convergence in work attitudes among mass production factory workers and office employees at any level of man-machine relationship. Moreover, he attached little significance to the convergence between craftsmen and clerical workers, since research indicates that the former have more positive attitudes toward work. But he interpreted some convergence in attitudes among workers in automated production systems as an indication that automated technology in the office and factory creates some commonality among workers most closely related to the technology.

The findings appeared to support the thesis that automation reverses the historical trend toward increased alienation from work among factory workers, but office employees working with the computer do not yet appear to have the amount of freedom and control found in an automated continuous-process factory. In both office and factory, the findings lend further support to the notion that work attitudes are favorably affected by job enlargement or the reduction of job specialization through the creation of new man-machine relationships.

2.4.04 THE UNIVERSITY OF MICHIGAN-WAYNE STATE UNIVERSITY

ANN ARBOR, MICH.

GRANT NO. 91–24–66–03

Principal Staff: Dr. Louis A. Ferman, Institute of Labor and Industrial Relations

Report Title: Community Organization and the Mobilization of Resources for Manpower Development Programs

Abstract: This study sought to relate measures of the economic and social structure of a community to the diffusion of power in the community and, in turn, to the community's willingness to cooperate in Federal aid programs, especially manpower training programs. Studies by other researchers imply, according to the present study, that communities in which power is less concentrated (and therefore more easily contested) are better able to avail themselves of Federal aid programs.

Measures of community structure could be developed from published data for 656 incorporated places with population of 25,000 or more that existed in 1950. However, it proved impossible to develop the necessary measures for programs under the Manpower Development and Training Act and the Vocational Education Act, chosen to represent locally developed manpower programs that were independent of county or State jurisdictional development. The MDTA data, based on Congressional districts, could not be redistributed to match the community structure data. The vocational education data were not available from a central source, and a canvass of 150 of the communities disclosed that the data generally could not be separated from statistics on general education. Hence, the researcher was not able to apply his analytical scheme to community receptivity of Federal manpower programs.

2.4.05 NORTH TEXAS STATE UNIVERSITY

DENTON, TEX.

GRANT NO. 91–46–68–38

Principal Staff: Dr. Sam B. Barton, Professor of Economics

Report Title: The Use of Workmen's Compensation Statistics as a Measure of Underwriter Performance

Abstract: This study attempted to develop and test statistical indices of underwriter performance which might be used by administrative agencies to measure and stimulate action by workmen's compensation insurance companies. In addition to the usual measures based on promptness in reporting and in payment, measures tested in the study were based on type of settlement, extent and promptness of reemployment, fullness of reporting, and a variety of "questionable practices."

The study was based on a random sample of 4,268 cases of the approximately 70,000 handled by the Texas Industrial Accident Board during the fiscal year that ended August 31, 1967.

The study fell into two main sections. The first explored the selection pattern of underwriters, as a group, with respect to type of settlement, in terms of the implications of these actions for the injured workers. Both the nature of the injury and the extent of disability were prime considerations in the choice of method of settlement: (1) Informal, (2) compromise, (3) board, and (4) court.

Cases chosen for informal settlement were, typically, temporary total disabilities of relatively short duration, involving small cash payments and ending generally in reemployment. Medical aid and weekly cash benefits (after the waiting period) were provided promptly and until the injured worker could return to the job. In such settlements the case might, if complications developed, be reopened. Some 28 percent of the work injuries in the sample were handled informally.

Compromise settlement agreements were concentrated on permanent partial disabilities and were used in more than 4 of every 5 cases of amputations and hernias. This type of settlement between skilled insurance adjusters and frequently uninformed and necessitous workers usually involved delay of benefits, with the first payment made only after the agreement was signed in nearly half the cases. More seriously, a compromise agreement closed the case to future reevaluation. Nearly half of the cases included in the sample were compromised. Reemployment was much less frequent in these cases than in those settled informally.

Board and court cases emphasized fatalities and permanent disabilities. These disabilities were found to involve longer duration than the first two types and smaller prospects of post-injury employment. Court cases involved larger payments than board cases. Only 2 percent of the sample cases were finally settled at board level and only 0.4 percent went to jury trial. The possibility of jury trial, however, was the most significant restraint on underwriter abuse.

The second portion of the study ranked the performance of the top 33 underwriting companies in Texas in terms of 10 different indices including elapsed time from disability to report of injury by the employer, to first payment of benefits and return to work; elapsed time from report of injury by the employer to receipt by the Texas Industrial Accident Board of the report from the underwriter; and representation of claimant by physician or lawyer, or both.

Excessive time lags in reporting, payments, and other factors were found in about one-third of the cases in the sample, with individual companies varying from 22 to 51 percent in this regard. The date of the first weekly benefit payment could not be satisfactorily related to underwriter performance because the date was not recorded in half the cases. The information was complete in less than 10 percent of all cases investigated. Thirty-nine percent of the companies surveyed showed three or more "questionable" practices and from 19 to 69 percent of the cases of individual companies fell in this class. One of the prevalent questionable practices was the settlement of cases, frequently even the most serious ones, without either medical or legal representation being available to the claimant. Medical representation if present was frequently made available only through the use of the underwriter's doctor.

Since the two standard measures of performance—promptness of reporting and of payment—were not highly correlated with each other, the researcher experimented with developing a composite index of underwriter performance. Each company was ranked on 10 measures showing the highest relationship to the two standard measures, and the ranks were averaged for the company to get the composite index for the company. Three of the measures included in the composite related to type of settlement, three to time intervals, and two to combined measures. The rankings seemed to indicate a strong tendency for companies that ranked high by one measure to rank high in most others.

2.4.06 RUTGERS—THE STATE UNIVERSITY
NEW BRUNSWICK, N.J.

GRANT NO. 91-32-68-74

Principal Staff: Leon Jansyn, Eric Kohlhof, Charles Sadowski, and Jackson Toby, Institute for Criminological Research, Department of Sociology

Report Title: Ex-Offenders as Small Businessmen: Opportunities and Obstacles

Abstract: This study of former offenders' attempts to become self-employed sought to develop tentative guidelines for enhancing success through proper selection and assistance. It is based on interviews with 22 self-employed ex-offenders selected from the records of current parolees and former inmates of a rehabilitation facility in New Jersey.

The businesses established were: Four retail food stores, four service firms, a haberdashery, a job-lot sales firm, 10 construction firms, an auto mechanic shop, and an industrial screwmachine operation. At the time of the study, six were judged successful, 10 marginally successful, and six failing, based largely on annual income ($12,000–$20,000; $6,000–$12,000; and less than $6,000, respectively) and viability of the business. Two from the marginal group and one from the failure group had already given up their businesses.

The least successful seemed to feel that the business was not worth much hard work and that their fortunes were beyond their control. Most of the men in all groups had gone into business because they wanted to be self-reliant and free of supervision. Others wanted to keep for themselves all of the profits of their labor or to earn large amounts of money.

All but two men had experience in small business—seven as owners and 13 as employees. This experience helped the latter group to develop the confidence and imagination to see themselves as businessmen, as well as to learn the technical aspects of the business.

None of the men was a member of a business organization, seeing little benefit in joining. And only four depended on people other than relatives such as suppliers, inside business informants, or partners, and none sought social involvement or interdependence with other businessmen.

Nearly all acknowledged receiving some help from friends or family but usually did not credit their success to this assistance. The presence of wives seemed to be strongly related to success: all of the most successful and six of the 10 marginally successful were married, but only one of the least successful was married.

Success did not appear to be related to type of offense, number of convictions, or education, according to the researchers.

They concluded that their findings justified establishment of small programs to assist former offenders who are interested and willing to make the effort to set up their own business. They offered several guidelines for selecting candidates for such programs.

2.4.07 UNIVERSITY OF SANTA CLARA
SANTA CLARA, CALIF.

GRANT NO. 91–05–68–72

Principal Staff: Thomas M. Martinez, Department of Sociology

Report Title: Past and Present Counseling and Placement Procedures in Private Employment Agencies—An Empirical Study

Abstract: This study analyzed the social and psychological influence of the use of private, white-collar employment agencies upon workers. It followed development of such employment agencies in the United States and their counseling and placement techniques. The planned attention to treatment of members of minority groups proved impossible.

Library research on agency history and practices was supplemented by interviews with 63 former applicants of private employment agencies, most of whom were young men in the lower ranks of industrial management, engineering, sales, computer programing, and accounting. A number of agency owners were interviewed and the researcher's own experience in working for such agencies in the San Francisco Bay area was included.

Private employment agencies, which apparently began operating in the United States in the early nineteenth century, were for a long time largely devoted to recruiting and placing immigrant manual workers and female domestic servants. Although data are sparse, it is clear that many agencies followed abusive practices—misrepresentation of the terms and conditions of employment, usually through misleading advertisement; fee-splitting with employers; or discrimination because of race or religion, especially against Negroes and Spanish-speaking Americans. Such practices led to State regulation of private agencies in many cases.

While most of the agencies covered in this study claimed to offer counseling service to job applicants, little or no counseling occurred; there was universal agreement among users interviewed that agency knowledge of the job market was inadequate. It was clear that those most in need of help in finding jobs were given less consideration than more independent users.

A majority of the agency users interviewed felt that their self-esteem had suffered in the use of the agency.

They had been unable to find jobs for themselves, and some felt employers denigrated users of the agencies.

Private employment agencies are currently lobbying for professional status and the consequent right to regulate themselves. California in 1967 became the first State to permit self-regulation despite the lack of criteria for professional standards by and for agents.

2.4.08 STANFORD UNIVERSITY
PALO ALTO, CALIF.

GRANT NOS. 91–05–66–53
91–05–68–34

Principal Staff: Dr. Melvin W. Reder, Department of Economics

Report Title: Unemployment Among New Labor Market Entrants

Abstract: This study examined the importance of certain aspects of labor force composition as a determinant of differences in frictional unemployment percentages. The study focused on: (1) The relative importance in the labor force of workers with a high "turnover propensity," and (2) the process by which individuals move into and out of employment. The study also showed how the job allocating procedures of an economy serve to relate fluctuations in aggregate demand to changes in the level of unemployment and its distribution among various groups. The study summarized the evidence and explored the theoretical implications of the fact that a disproportionate share of total unemployment falls upon new workers (new entrants—and reentrants into the labor force—such as young people, recent rural-urban migrants, and workers intermittently attached to the labor force). It also contained a brief discussion of international differences in unemployment rates and of the limited evidence on the extent to which they result from differing proportions of new and other workers. The researcher also speculated on the role wage rigidity plays in the differences.

2.4.09 VANDERBILT UNIVERSITY
NASHVILLE, TENN.

GRANT NO. 91–45–67–19

Principal Staff: Dr. T. Aldrich Finegan, School of Economics

Report Title: The Economics of Labor Force Participation

Abstract: The work performed under this grant was part of an encyclopedic study, of which the grant recipient is co-author. The study is a comprehensive analysis of the effects of individual characteristics and labor market conditions on the labor force participation rates of all major population groups in the United States. Both cross-sectional and time-series analyses are based principally on data derived from the decennial censuses of 1940, 1950, and 1960 and from the Census Bureau's monthly surveys of households for 1947–67. The analytical variables include such personal characteristics as age, sex, marital status, color, educational attainment, and school enrollment; local labor market conditions (unemployment, earnings, and industry mix); and factors that might affect specific groups such as the age of married women's children and social security provisions for the elderly.

The theoretical framework of the analysis is the concept that each household determines the labor force status of its members through a collective decisionmaking process which governs the allocation of each member's time between labor force participation and all other pursuits. The household's decisions are seen as depending on tastes, expected market earnings rates, expected nonmarket rates, and the household's resources.

2.4.10 WEST VIRGINIA UNIVERSITY
MORGANTOWN, W. VA.

GRANT NO. 91–52–68–10

Principal Staff: Dr. John D. Photiadis, Appalachian Center

Report Title: Selected Social and Sociopsychological Characteristics of West Virginians in Their Own State and in Cleveland, Ohio

Abstract: This study of West Virginians living in their own State and in Cleveland, Ohio, investigated their socioeconomic status, their social orientations, their attitudes and values concerning many aspects of life, and their satisfaction with their situation. Data were obtained in interviews with four groups of male heads of households: Those who had not left West Virginia (876); those living in the so-called Appalachian ghetto of Cleveland (167); those living in Cleveland suburbs (386); and those who had returned to West Virginia (232).

It was found that, in Cleveland, migrants initially moved to the ghetto and as they became more skilled in working and in understanding the urban culture, a considerable number moved to the suburbs. Suburbanites—physically healthier, slightly older, more educated and skilled, and valuing family life more highly than those who remained in the ghetto—saw society as more orderly and felt more a part of it than people in the other three groups. Suburbanites tended to possess attributes such as level of living, income, church participation, and attitudes toward social issues that fit the urban middle-class stereotype; they entered the larger society with relatively full credentials. The migrants who remained in the ghetto were also oriented toward the larger society. They were, however, younger, predominantly semiskilled, often newer to Cleveland, less stable in holding a job, and living at a lower level than suburbanites.

Migrants who returned to West Virginia were older, unskilled, and had lower levels of income and living than members of the other three groups. These migrants did not return because they did not like city life or people but primarily because of the employment situation. The majority either found jobs in West Virginia or were laid off from their jobs in Cleveland. Larger proportions of returned migrants, as compared with nonmigrants, saw Appalachia as the place where one can be happy without sufficient income. They were, however, divided as to whether Appalachia should become like the rest of the country in habits, customs, and attitudes toward life.

In spite of considerable differences in income, health, style of life, opportunities, expectations, and value orientations, the four groups did not differ in overall satisfaction with life, but did differ in satisfaction with particular aspects of life. For instance, the two low-income groups (ghetto residents and returned migrants) were a little less satisfied with their income than the other groups; suburbanites were a little more satisfied with their family life; and ghetto residents were a little less satisfied with their community life. On this basis, migration appeared to serve as an outlet that people use to fulfill societal expectations and in turn to achieve self-satisfaction in the process of adjusting to the occupational, social, and psychological dislocations brought on by technological changes.

2.4.11 THE UNIVERSITY OF WISCONSIN
MADISON, WIS.

GRANT NO. 91-53-69-03

Principal Staff: Dr. David Chaplin, Department of Sociology

Report Title: Private Household Employment in the United States: An Exploratory Project

Abstract: This study analyzed and reassessed all available data on private household employment from 1900 to 1960 to suggest desirable and feasible reforms in the working conditions of domestics.

Data sources included: The 1960 Census; a 1965 Current Population Survey ordered by the Institute for Research on Poverty; a 1966 Women's Bureau Survey of 1,000 workers and 1,600 employers; surveys undertaken since 1900, especially by the Department of Labor; published census and State statistical reports on private household work; and general occupational surveys.

His review of the employment statistics on household workers persuaded the researcher that the country is now at the end of a long process of derationalization in which fewer workers per household were expected to perform more and more tasks on an increasingly part-time basis. The growing casualization of the occupation has also tended, for a variety of reasons, to exaggerate the decline in the total number of workers in the occupation as enumerated by the Census, which the researcher believed underestimates the number of such workers by about one-third.

Most of the problems with respect to the reform of domestic service as an industry were found to be related to the fact that domestic service, especially in larger cities and in the South, is becoming a predominantly Negro occupation. The major structural problem was seen as rationalizing personal care (i.e., care of children and dependent adults) in private homes; cleaning and home maintenance are now being rationalized. He also found that the increasing blackness of ghetto areas, their distance from (and poor transportation to) employer areas, and the resulting disruption of lower class Negro family life would make the continuance of domestic service under current conditions untenable.

Nevertheless, the researcher believed that reform could be accomplished through a comprehensive program. The major suggested reform was granting a tax exemption to employers who pay domestic servants at least the Federal minimum wage and who were themselves either employed or seriously pursuing education. He also advocated such measures as family planning assistance, space in apartment complexes for child-care workers, and preference in requesting immigrant household workers for employed women with dependents.

2.4.12 THE UNIVERSITY OF WISCONSIN
MADISON, WIS.

GRANT NO. 91-53-70-02

Principal Staff: Dr. Gerald G. Somers, Industrial Relations Research Institute

Report Title: Pilot Feasibility Study of Training in Business and Industry

Abstract: This study examined the feasibility of a national mail survey of training in industry. It sampled 248 firms in eight cities by interview. Mail questionnaires for each training program and a questionnaire on cost for all training programs were left with respondents if they said they would be willing to complete them.

One-hundred and seventy firms had programs, but only 24 mail questionnaires were returned, many of which had severe information gaps. Only 18 firms attempted to furnish cost data.

Analysis of this survey led the researcher to the following recommendations:

1. A national mail questionnaire survey of the type planned is not feasible. Findings that support this view include the following:

> —Only a relatively small proportion of the firms kept records concerning training and trainees—type of training, duration, upward mobility of those who had training—that could be readily transferred to a questionnaire form.
>
> —Data on trainees in on-the-job training and classroom training were sparse. In fact, there was a considerable confusion about the meaning of the term "on-the-job training." (Supervisory training, excluded from the detailed data-gathering of the questionnaire, was the kind of training management was most interested in.)
>
> —Middle-sized firms appeared to be the least able to provide data because their training was too extensive to be covered by memory, and yet their organization and personnel were insufficient for detailed records or tabulation of data.
>
> —Records on the cost of training, along the lines requested, were almost nonexistent.

2. There was somewhat greater support among the interviewers for a simplified interview approach, directed to a relatively small sample of large firms, buttressed by a much simpler mail questionnaire for a larger sample of large firms. Questionnaires, to be differentiated according to industry, should ask essentially for general estimates. The insignificant amount of training taking place in small firms does not warrant inclusion of many small firms in a national survey, but some should be included for purposes of generalization based on company size.

This pilot study formed the basis for a recently initiated BLS national survey (supported by the Office of Research and Development) to explore training in 500 establishments in the metalworking and public utilities industries. Particularly useful to BLS in designing its study were the pilot study's findings that identified the type of data that could be collected from mail questionnaires only or mail questionnaires combined with personal interviews at the plant. An experimental feature will test whether employers can maintain special records (diaries) related to training. (See **1.1.16.**)

SECTION 3. LIST OF REPORTS COMPLETED, FISCAL YEARS 1963–70

This section lists the completed reports described in section 2 and those completed prior to July 1, 1969, on research contracts, institutional grants, doctoral dissertation grants, and research project grants. These contracts and grants were awarded under the Manpower Development and Training Act, the Economic Opportunity Act, and the Social Security Act.

This is the last cumulative listing of completed research reports. Listings in future volumes will be limited to recently completed research.

ABBREVIATION KEY AND EXPLANATION

PLEASE READ CAREFULLY TO AVOID UNNECESSARY DELAYS IN OBTAINING REPORTS. DO NOT ROUTINELY WRITE TO THE MANPOWER ADMINISTRATION FOR THESE REPORTS.

Section 3 lists reports on research completed for the Manpower Administration under contracts and grants during fiscal years 1963–70. (A few projects which did not result in formal reports are omitted; for example, machine printouts of special tabulations.) This is to be the last cumulative listing of completed research reports. Listings in future volumes will be limited to recently completed research.

Since the Manpower Administration's supply of these reports usually permits distribution only on a highly selective basis, arrangements were made during fiscal year 1968 for sale of the reports through two federally operated information storage and retrieval systems. These arrangements, as well as other sources of the reports and related publications, are indicated in the right-hand column of the listing. The key to the abbreviations used there and instructions for obtaining the publications are as follows:

CFSTI—Clearinghouse for Federal Scientific and Technical Information, Springfield, Va. 22151. Copies of reports with this designation may be purchased for $3 (paper) or 65 cents (microfiche) each. Send remittance with order directly to the clearinghouse and specify the accession number (AD or PB plus a 6-digit number) given in the listing.

ERIC—Educational Resources Information Center, EDRS, c/o NCR Co., 4936 Fairmont Ave., Bethesda, Md. 20014. Copies are priced according to the number of pages. The first price in the listing is for paper; the Mf price is for microfiche. Send remittance with order directly to ERIC-EDRS and specify the accession number (ED or MP plus a 6-digit number) given in the listing.

GPO—Government Printing Office. Send orders directly to Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, with remittance for specified amount.

MA—Manpower Administration. Single copies free upon request to U.S. Department of Labor, Manpower Administration, Associate Manpower Administrator, Washington, D.C. 20210.

Other sources are indicated for a few publications. Order from the specified source or, for books, from bookstores.

In addition, reports on contract research projects (3.1 and 3.2 of this section) are available for inspection in the Manpower Administration's Office of Research and Development or in regional offices of the Bureau of Labor Statistics (BLS) and the Manpower Administration (MA). (See addresses, p. 179.) They may also be inspected at the universities which hold manpower research institutional grants (section 1.3). They may also be available at certain libraries listed on pp. 180-184. However, some of these libraries were not subscribers at the time some of the reports were distributed.

Reports on dissertation research grants (included in 3.4 of this section) can usually be purchased from University Microfilms, Inc., 300 North Zeeb Road, Ann Arbor, Mich. 48102, but current information on prices is not available. Those for sale by CFSTI are indicated in the listing.

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3.1 LIST OF REPORTS COMPLETED, FISCAL YEARS 1963–70—
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3.1.01 American Association of University Women Educational Foundation—Eleanor F. Dolan, No. 81–08–18 Counseling Techniques for Mature Women—Report of the Adult Counselor Program, June 14–August 6, 1965	CFSTI—PB 177322.
3.1.02 American Institutes for Research—James W. Altman and Edward J. Morrison, No. MDTA 37–64 School and Community Factors in Employment Success of Trade and Industry Course Graduates	
3.1.03 Arthur D. Little, Inc.—No. MDTA 17–64 Analysis of Automation Potential by Means of Unit Operations	CFSTI—PB 177415.
3.1.04 Association for the Help of Retarded Children, New York Chapter—Jack Tobias, Ida Alpert, and Arnold Birenbaum, No. 81–31–21 A Survey of the Employment Status of Mentally Retarded Adults in New York City	CFSTI—PB 185574; "Retardation, Poverty, and Jobs," *Manpower*, vol. 1, No. 8, September 1969, pp. 30–32.
3.1.05 Atlantic Research Corp.—John F. Wallerstedt, Hans W. Weigert, and Col. Walter R. Lawson, USA (Ret.), No. 81–49–68–19 An Analysis of Post-World War II Manpower Research, Policy and Program Experience Applicable to Current Manpower Planning for Peacetime Conversion of Military Manpower to Civilian Occupations	CFSTI—PB 183258; ERIC—MP 000729 ($18.00, Mf $1.50).
3.1.06 Auerbach Corp.—Richard Ridall and Murray Dodge, No. OAM 7–63 A Study of Manpower Requirements for Technical Information Support Personnel	CFSTI—PB 177331; MA—*Manpower for Technical Information Work—A Pilot Study*, Manpower/Automation Research Monograph No. 1, 1964 (summary); Manpower/Automation Research Notice, 1964 (digest).

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3.1.07 Behavior Research Institute—Sheldon J. Lachman and Benjamin D. Singer, No. 81–24–68–03 The Detroit Riot of July 1967—A Psychological, Social and Economic Profile of 500 Arrestees	CFSTI—PB 178035; ERIC—MP 000559 ($3.24, Mf $0.50); MA—*The Detroit Riot . . . A Profile of 500 Prisoners* (summary); and "Profile of an Urban Rioter," *Employment Service Review*, March-April 1968, pp. 38–40 (digest).
3.1.08 Bureau of Social Science Research, Inc.—Laure M. Sharp and Albert D. Biderman, Nos. MDTA 16–63 and 81–08–26 The Employment of Retired Military Personnel	CFSTI—AD 646463; MA—"Out of Uniform," reprint from *Monthly Labor Review*, January and February 1967 (excerpts); Manpower/Automation Research Notice, 1966 (digest); "The Employment of Retired Military Personnel," *American Vocational Journal*, January 1969 (summary and evaluation); "The Convergence of Military and Civilian Occupational Structures—Evidence from Studies of Military Retired Employment," *The American Journal of Sociology*, vol. 73, No. 4, January 1968, pp. 381–399.
3.1.09 California, University of, Berkeley—Margaret S. Gordon, No. MDTA 8–63 Retraining and Labor Market Adjustment in Western Europe	CFSTI—AD 603647; GPO—Manpower/Automation Research Monograph No. 4, 1965 ($1.75).
3.1.10 California, University of, Berkeley—R. A. Gordon, No. MDTA 32–64 Long-Term Manpower Projections—Proceedings of a Conference on Unemployment and the American Economy, June 25–26, 1964	CFSTI—PB 177432.
3.1.11 California, University of, Berkeley—Edward R. F. W. Crossman et al., No. 81–04–05 Evaluation of Changes in Skill Profile and Job Content Due to Technological Change; Methodology and Pilot Results from the Banking, Steel and Aerospace Industries	CFSTI—PB 174221; ERIC—ED 015326 ($12.32; Mf $1.25); MA—Manpower/Automation Research Notice, 1966 (digest).
3.1.12 California, University of, Berkeley—Edward R. F. W. Crossman and Stephen Laner, assisted by Stanley H. Caplan, Tarald Kvalseth, and Frederick Schneider, No. 81–05–66–30 The Impact of Technological Change on Manpower and Skill Demand: Case-Study Data and Policy Implications	CFSTI—PB 191290.

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3.1.13 California, University of, Berkeley—Margaret S. Gordon and Margaret Thal-Larsen, No. 81-05-67-24 Employer Policies in a Changing Labor Market—Report of the San Francisco Bay Area Employer Policy Survey	CFSTI—PB 188051; "Changing Employer Policies in a Large Urban Labor Market," *IRRA Proceedings*, Winter 1968, pp. 248–256.
3.1.14 California, University of, Los Angeles—Paul Prasow and Fred Massarik, No. 81-04-36 A Longitudinal Study of Automated and Nonautomated Job Patterns in the Southern California Aerospace Industry	CFSTI—PB 184856.
3.1.15 Cambridge Center for Social Studies—Rev. Joseph M. Becker, S.J., No. 81-23-66-03 Supplemental Unemployment Benefits	CFSTI—PB 178389 (original report); ERIC—MP 000650 ($22.30, Mf $1.75); *Guaranteed Income for the Unemployed: The Story of SUB*, Johns Hopkins Press, Baltimore, 1968 ($12.00, book based on the study); Sar A. Levitan, ed., "Private Supplementation of Public Unemployment Benefits," *Towards Freedom From Want*, Industrial Relations Research Association, Madison, Wis., 1968, pp. 105–132 ($4.50).
3.1.16 Census, Bureau of the—Wilson H. Grabill, No. MDTA 27-64 Childspacing: U.S. Census of Population, 1960, Subject Reports, Series PC(2)-3B	GPO—1968 ($1.00).
3.1.17 Census, Bureau of the—Stanley Greene, Nos. MDTA 28-64 and 81-09-66-06 Labor Reserve: U.S. Census of Population, 1960, Subject Reports, Series PC(2)-6C	GPO—1966 ($1.50).
3.1.18 Census, Bureau of the—David P. McNelis, No. MDTA 81-09-66-10 Characteristics of Local Government Employees—A Pretest Survey	CFSTI—PB 177323; ERIC—MP 000628 ($1.00, Mf $0.25).
3.1.19 Colorado, University of—Leslie Fishman et al., No. MDTA 42-64 Methodology for Projection of Occupational Trends in the Denver Standard Metropolitan Statistical Area	CFSTI—PB 177325; ERIC—ED 016132 ($8.16, Mf $1.00).

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3.1.21 Columbia University—Eli Ginzberg, Dale L. Hiestand, and Beatrice G. Reubens, No. MDTA 10–64 The Pluralistic Economy	ERIC—MP 000218 ($1.72, Mf $0.25); McGraw-Hill Book Co., New York, 1965 ($1.95, paperback); MA—*Expanding Employment in a Pluralistic Economy*, Seminar on Manpower Policy and Program, October 1965 (summary); MA—Manpower/Automation Research Notice (digest).
3.1.22 Columbia University—Aaron W. Warner and Paul H. Norgren, No. MDTA 15–64 Obsolescence and Updating of Engineers' and Scientists' Skills: A Pilot Study	CFSTI—PB 178168; ERIC—ED 015324 ($6.64, Mf $0.75).
3.1.23 Columbia University—Harry I. Greenfield, No. 81–31–12 Manpower and the Growth of Producer Services	ERIC—ED 016143 (Mf $0.75); Columbia University Press, New York, 1966 ($6.00).
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3.1.25 Columbia University—Eli Ginzberg, Nos. 81–34–66–02 and 81–34–67–25 (a) The Middle Class Negro in the White Man's World; (b) Men, Money, and Medicine	(a) Columbia University Press, New York, 1967 ($5.00); (b) CFSTI—PB 193413; Columbia University Press, New York, 1969 ($8.50).
3.1.26 Columbia University—Alfred S. Eichner, No. 81–34–67–25 State Development Agencies and Employment Expansion	Policy Paper No. 18, Institute of Labor and Industrial Relations, P.O. Box 1567, Ann Arbor, Mich. 48106 ($2.25).
3.1.27 Columbia University—Marcia Freedman, No. 81–34–67–25 The Process of Work Establishment	Columbia University Press, New York, 1969 ($6.75).

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3.1.28 Columbia University—Harry I. Greenfield, No. 81–34–67–25 Allied Health Manpower: Trends and Prospects	Columbia University Press, New York, 1969 ($8.00); "Making Better Use of Health Personnel," *Manpower,* vol. 1, No. 3, April 1969, pp. 3–6.
3.1.29 Columbia University—Dean Morse, No. 81–34–67–25 The Peripheral Worker	Columbia University Press, New York, 1969 ($7.50).
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3.1.31 Columbia University—Thomas M. Stanback, Jr., and Richard V. Knight, No. 81–34–67–25 The Metropolitan Economy: The Process of Employment Expansion	Columbia University Press, New York, 1970 ($10.00).
3.1.32 Commission on Human Resources and Advanced Education—John K. Folger, No. 81–09–66–16 Symposium on Manpower Theory	CFSTI—PB 177412; *The Journal of Human Resources,* vol. II, No. 2, Spring 1967, pp. 143–253 ($2.00).
3.1.33 Cornell University—David Rogers, with the assistance of Faith Kortheuer and Roslyn Menzel, No. 81–34–68–39 An Exploratory Study of Inter-Organizational Relations	CFSTI—PB 184848; ERIC—MP 000938 ($4.45, Mf $0.50).
3.1.34 Denver, University of—James F. Mahar and George E. Bardwell, No. MDTA 36–64 A Method of Measuring Short-Term Impacts of Technological Change on Employment and Occupations—As Tested in Selected Power Laundries	CFSTI—PB 170177; MA—Manpower/Automation Research Notice, 1966 (digest).
3.1.35 Employment Security, Bureau of—Alfred L. Green, No. 81–09–66–12 Manpower and the Public Employment Service in Europe—A Study of Programs and Operations	CFSTI—PB 177410.

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3.1.36 Employment Service, U.S. Training and—William R. Fischer, Wisconsin State Employment Service, No. 81–53–67–04 Project Vision, An Experiment with Occupational Needs Projection Techniques for Vocational Education Curriculum Planning Purposes in the Milwaukee, Wisconsin SMSA	CFSTI—PB 193301.
3.1.37 Florida, University of—J. Kamal Dow, No. 81–10–68–34 Historical Perspective of the Florida Citrus Industry and the Impact of Mechanical Harvesting on the Demand for Labor	CFSTI—PB 191289.
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3.1.39 Georgia Institute of Technology—John L. Fulmer, Robert E. Green, and Paul B. Han, No. MDTA 19–63 Research Design to Forecast Demand for New Types of Technicians in an Industry	CFSTI—AD 602431.
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3.1.41 Greenleigh Associates, Inc.—No. 81–34–68–27 A Study to Develop a Model for Employment Services for the Handicapped	CFSTI—PB 186151; ERIC—MP 000937 ($7.40, Mf $0.75).
3.1.42 Harvard University—James G. Scoville, No. MDTA 29–64 The Job Content of the U.S. Economy, 1940–1970	McGraw-Hill Book Co., New York, 1969 ($6.95).

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3.1.43 Harvard University—Peter B. Doeringer and Michael J. Piore, No. MDTA 38-64 Internal Labor Markets, Technological Change, and Labor Force Adjustment	CFSTI—PB 174614; MA—Reprinted in *Work Force Adjustments in Private Industry—Their Implications for Manpower Policy*, Manpower/Automation Research Monograph No. 7, 1968.
3.1.44 Harvard University—Peter B. Doeringer and Michael J. Piore, No. 81-23-66-22 Internal Labor Markets and Manpower Analysis	CFSTI—PB 193079; D.C. Heath and Company, Boston (in process).
3.1.45 Harvard University—James G. Scoville, No. 81-23-67-23 Concepts and Measurements for Manpower and Occupational Analysis	CFSTI—PB 187702.
3.1.46 Harvard University—Daniel Quinn Mills, No. 81-23-68-11 A Study of Problems of Manpower Utilization in the Construction Industry: Intermittency of Employment, Unemployment and Labor Shortages	CFSTI—PB 184849; ERIC—MP 000936 (Mf $0.50).
3.1.47 Houston, University of—E. E. Liebhafsky, No. 81-42-04 An Analysis of Forces Underlying Decisions of Potential Workers to Refrain from Labor Force Participation	CFSTI—PB 177430.
3.1.48 Houston, University of, and Texas Southern University—Joseph E. Champagne and Robert L. Prater, No. 81-46-68-02 Teenage Employment: A Study of Low Income Youth in Houston, Texas	CFSTI—PB 186507.
3.1.49 Human Sciences Research, Inc.—Sidney A. Fine, No. OAM 3-63 The Nature of Automated Jobs and Their Educational and Training Requirements	CFSTI—PB 173177.
3.1.50 Illinois Institute of Technology—Elmer H. Burack, No. 81-15-66-17 Management and Automation	CFSTI—PB 179315.

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3.1.156 Upjohn Institute for Employment Research, The W. E. —Orley Ashenfelter, No. 81–09–67–13 Minority Employment Patterns, 1966 (Analysis of Employer Information Report—EEO-1)	CFSTI—PB 180385.
3.1.157 Upjohn Institute for Employment Research, The W. E. —Sidney Fine, No. 81–09–67–22 The Feasibility of a Direct Method of Obtaining Manpower Demand Data, Report for Discussion—Phase I, Nov. 8, 1968	CFSTI—PB 182146.
3.1.158 Urban Institute, The—Charles C. Holt, No. 82–09–68–44 Inflation, Unemployment and Manpower Policy	The Urban Institute, Washington, D.C., 1970; "How Can the Phillips Curve Be Moved to Reduce Both Inflation and Unemployment?" and "Job Search, Phillips' Wage Relations, and Union Influence: Theory and Evidence," *The Microeconomic Foundations of Employment and Inflation Theory*, Edmund S. Phelps, ed., W. W. Norton & Company, Inc., New York, 1970 ($9.50); "Improving the Labor Market Trade-Off Between Inflation and Unemployment," *The American Economic Review*, vol. 50, No. 2, May 1969, pp. 135–146.
3.1.159 U.S. Industries, Inc.—Richard E. Walther and Leigh H. Ferguson, No. MDTA 35–64 A Pilot Study of the Use of Area of Interest Self-Instructional Reading Courses Among Young Persons Considered to be Neither Self-Motivated nor Self-Supporting	CFSTI—PB 177402; ERIC—MP 100 ($5.08, Mf $0.50).
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3.1.164 Wayne State University—Hjalmar Rosen, No. 81-24-68-35 On-the-Job Orientation of Unemployed Negro Skill Center Trainees and Their Supervisors	CFSTI—PB 192568.
3.1.165 Wisconsin, The University of—James L. Stern and David B. Johnson, No. MDTA 14-63 Blue- to White-Collar Job Mobility	CFSTI—PB 177360; MA—Manpower/Automation Research Notice, 1968 (digest); Industrial Relations Research Institute, University of Wisconsin, Madison, Wis. 53706; "Why and How Workers Shift from Blue-Collar to White-Collar Jobs," *Monthly Labor Review*, October 1969, pp. 7–13.
3.1.166 Wisconsin, The University of—G. Soundara Rajan, No. 81-48-06 A Study of the Registered Apprenticeship Program in Wisconsin	CFSTI—PB 177422; ERIC—MP 000162 (Mf $1.25); Industrial Relations Research Institute, University of Wisconsin, Madison, Wis. 53706, 1966 ($2.00).
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3.1.169 Wisconsin, The University of—Gerald G. Somers and J. Kenneth Little, No. 81-53-68-41 Cost-Benefit Analysis of Manpower Policies, Proceedings of a North American Conference	Industrial Relations Centre, Queens University, Kingston, Ontario, Canada, and Center for Studies in Vocational and Technical Education, The University of Wisconsin, Madison, Wis. 53706 ($5.00).
3.1.170 Women's Bureau—Pearl G. Spindler, Women's Bureau, and Seth Low, Children's Bureau, No. 81-08-08 Child Care Arrangements of Working Mothers in the United States (In cooperation with U.S. Department of HEW, Social and Rehabilitation Service, Children's Bureau)	GPO—$1.25.
3.1.171 Women's Bureau—Mary Hilton, No. 81-08-10 New Approaches to Counseling Girls in the 1960's—A Report of the Midwest Regional Pilot Conference Held at University of Chicago Center for Continuing Education, February 26–27, 1965	GPO—1966 ($0.30); "A Survey of Counselor Attitudes Toward Women," *Minnesota Guidance Bulletin*, Winter 1969 (article).
3.1.172 Women's Bureau—Mary Dublin Keyserling, No. 81-09-66-09 Counseling Girls Toward New Perspectives: A Report of the Middle Atlantic Regional Pilot Conference Held in Philadephia, Pa., December 2–4, 1965	GPO—1966 ($0.35).
3.1.173 Women's Bureau—Mary Dublin Keyserling, No. 81-09-68-15 Report of a Conference on Meeting Medical Manpower Needs—The Fuller Utilization of the Woman Physician, January 12–13, 1968, Washington, D.C.	Women's Bureau, U.S. Department of Labor, Washington, D.C. 20210; American Medical Women's Association (2 to 99 copies, $1.25 each; 100 or more copies, $1.00 each).

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3.2.02 Bureau of Social Science Research, Inc.—Leonard H. Goodman and Thelma D. Myint, No. 41–7–007–09 The Economic Needs of Neighborhood Youth Corps Enrollees	CFSTI—PB 186526; MA—*The Neighborhood Youth Corps: A Review of Research*, Manpower Research Monograph No. 13, 1970 (summary: GPO—$0.60); "Youth Corps Pay—Where It Goes," *Manpower*, vol. 2, No. 2, February 1970, pp. 29–31.
3.2.03 Bureau of Social Science Research, Inc.—Leonard H. Goodman, Laure M. Sharp, and Jean Ruffin, No. 51–09–69–03 Employment Contexts and Disadvantaged Workers, Phase I—Final Report	CFSTI—PB 190927.
3.2.04 Case Western Reserve University—Melvin E. Allerhand, Frank Friedlander, James E. Malone, Herman Medow, and Marvin Rosenberg, No. 41–7–002–37 A Study of Impact and Effectiveness of the Comprehensive Manpower Project of Cleveland (AIM-JOBS), volume I–Summary, volume II–Technical Report, volume III–Appendices	CFSTI—PB 190037 (vol. I); CFSTI—PB 190038 (vol. II); CFSTI—PB 190039 (vol. III).
3.2.05 Cornell University—Paul L. Gaurnier and William Fisher, No. 41–9–003–34 A Study of Career Ladders and Manpower Development for Non-Management Personnel in the Food Service Industry	CFSTI—PB 193299.

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3.2.06 Minnesota, University of—Richard E. Sykes, with chapters by Popie Mohring, Fraine Whitney, and Duane Wallen, No. 41–7–008–25 A Pilot Study in Observational Measurement of Behavioral Factors Associated with Increased Employability of Out-of-School Neighborhood Youth Corps Enrollees	CFSTI—PB 189034.
3.2.07 Minnesota, University of—R. Frank Falk, No. 41–8–003–25 The Frontier of Action: New Careers for the Poor—A Viable Concept	CFSTI—PB 191291.
3.2.08 National Analysts, Inc.—Gerald D. Robin, Nos. 41–7–001–40 and 81–40–66–18 An Assessment of the In-Public School Neighborhood Youth Corps Projects in Cincinnati and Detroit, with Special Reference to Summer-Only and Year-Round Enrollees. Interview Schedule Supplement	CFSTI—PB 183081; CFSTI—PB 183082 (interview schedule supplement); ERIC—MP 000854 ($32.40, Mf $2.50); MA—*The Neighborhood Youth Corps: A Review of Research*, Manpower Research Monograph No. 13, 1970 (summary; GPO—$0.60).
3.2.09 National League of Cities—Floyd A. Decker, Andrew B. Horgan, III, and Lawrence A. Williams, No. 41–8–001–09 Municipal Government Efforts to Provide Career Employment Opportunities for the Disadvantaged	CFSTI—PB 189912; "City Jobs: Rich Potential for the Poor," *Manpower*, vol. 2, No. 5, May 1970, pp. 12–15.
3.2.10 New York, The Research Foundation of State University of, Buffalo—John E. Drotning, David B. Lipsky, and Myron D. Fottler, No. 41–8–005–34 Jobs, Education, and Training: Research of a Project Combining On-the-Job and Literacy Training for the Disadvantaged, Phase I	CFSTI—PB 183331.
3.2.11 North Star Research and Development Institute—Guy H. Miles, No. 41–7–006–25 Survey of Recent Literature Relevant to Optimizing the Benefits of Neighborhood Youth Corps Projects for Rural Youth	CFSTI—PB 184980; MA—*The Neighborhood Youth Corps: A Review of Research*, Manpower Research Monograph No. 13, 1970 (summary; GPO—$0.60).

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3.2.13 North Star Research and Development Institute—Guy H. Miles, William F. Henry, and Ronald N. Taylor, No. 41–7–006–25 Final Report on Optimizing the Benefits of Neighborhood Youth Corps Projects for Rural Youth—Phase 2: A Follow-Up Study of 1144 Young Adults	CFSTI—PB 185881; MA—*The Neighborhood Youth Corps: A Review of Research,* Manpower Research Monograph No. 13, 1970 (summary; GPO—$0.60).
3.2.14 Rice University—Edwin Harwood and Robert Olasov, No. 41–7–003–46 Houston's Out-of-School Neighborhood Youth Corps: A Comparative Observational Study of the NYC's Impact on the Work Attitudes and Job Futures of Poverty Youths	CFSTI—PB 184978; MA—*The Neighborhood Youth Corps: A Review of Research,* Manpower Research Monograph No. 13, 1970 (summary; GPO—$0.60).
3.2.15 Staten Island Mental Health Society—Wallace Mandell, Sheldon Blackman, and Clyde E. Sullivan, No. 41–7–009–34 Disadvantaged Youth Approaching the World of Work: A Study of NYC Enrollees in New York City	CFSTI—PB 189015; MA—*The Neighborhood Youth Corps: A Review of Research,* Manpower Research Monograph No. 13, 1970 (summary; GPO—$0.60).

3.3 LIST OF REPORTS COMPLETED, FISCAL YEARS 1967–70—
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3.3.02 Employment Experience After MDTA Training: A Study of the Relationship Between Selected Trainee Characteristics and Post-Training Experience (Ph.D. Dissertation), by Benjamin Michael Trooboff	CFSTI—PB 190053.
3.3.03 Employment and Training: A Study of the 1965 Graduates of Carver Vocational High School in Atlanta, Georgia (Master's Thesis), by Lester E. Walker, Jr.	
3.3.04 Participation of Minority Group Members as Managers of Urban Programs, by Benjamin Michael Trooboff	*Journal of the American Institute of Regional and Urban Affairs*, May 1968.
3.3.05 Management Training Program in a Discount Store (Master's Thesis), by Manmohan Singh Sethi	CFSTI—PB 193391.
3.3.06 Economic Development and Employment: A Case Study of the State of Georgia (Master's Thesis), by Prem Prakash	CFSTI—PB 193392.
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3.3.14 Conceptualizations of a Longitudinal Study of Manager Performance, by Arthur C. MacKinney	Creativity Research Institute of the Richardson Foundation, Inc., Greensboro, N.C., July 1967; reprinted by Industrial Relations Center, Iowa State University, Ames, Iowa 50010.
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[1] This report was coauthored by Dr. James L. Miller, Jr.

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Research Project Grants Under the MDTA

Institution, Investigator(s), Grant No., and Title of Report	*Source of Copies (See abbreviation key and explanation, p. 177)*
3.5.01 American University, The—Charles A. Dailey, No. 91–09–66–25 Project Gatekeeper: The Reduction of Job Discrimination by the Use of Self-Confrontation and Feedback to the Discriminator	CFSTI—PB 177352; ERIC—ED 016137 ($5.32, Mf $0.75).
3.5.02 American University, The—Nancy Barrett, William Carter, Charles McClenon, Stuart Smith, and Robert Wolpert, No. 91–09–69–05 Pretraining Vocational Orientation Through Job Rotation	CFSTI—PB 182147.
3.5.03 Arizona, University of—Trevor Bain, No. 91–03–66–39 The Impact of Defense Contract Termination on the Labor Force	CFSTI—PB 177873; ERIC—MP 000669 ($4.20, Mf $0.50); *Defense Manpower and Contract Termination*, University of Arizona, Division of Economics and Business Research, Tucson, Ariz., 1968 ($1.00).
3.5.04 Central Washington State College—Clayton C. Denman and Anne Smith Denman, Nos. 91–51–66–51 and 91–51–68–39 Ethnic Differences and Historical Change in the Manpower Resources of a Small Town	CFSTI—PB 183159; "Social Customs and Facility Planning," *Area Development Magazine*, December 1968.
3.5.05 Cornell University—Leonard P. Adams, No. 91–34–66–41 Case Studies of Viable Worker Management Relationships on Farms in New York State	CFSTI—PB 182822; Bulletin 1019, Cornell University, Agriculture Experiment Station, Ithaca, N.Y. 14850.
3.5.06 Cornell University—William H. Friedland, No. 91–34–66–49 Migrant Labor as a Form of Intermittent Social Organization and as a Channel of Geographical Mobility	CFSTI—PB 177867; "Migrant Labor: A Form of Intermittent Social Organization," *ILR Research*, vol. 13, No. 2, 1967 (summary).

Institution, Investigator(s), Grant No., and Title of Report	*Source of Copies (See abbreviation key and explanation, p. 177)*
3.5.07 Cornell University—William H. Friedland and Dorothy Nelkin, No. 91–34–67–48 Field Research in Migrant Labor in New York State	
3.5.08 Dillard University—Daniel C. Thompson, No. 91–17–02 An Investigation of the Utilization of the Manpower Skills of the 1964 Graduating Class of Dillard University	CFSTI—PB 177871.
3.5.09 Educational Testing Service—Benjamin Shimberg and John V. Moe, No. 91–32–68–18 A Pilot Study To Determine the Feasibility of Investigating Nationally the Impact of Licensing Practices on the Availability and Mobility of Nonprofessional Manpower in Occupations Where Skill Shortages Exist	CFSTI—PB 178306; MA—*Occupational Licensing Practices and the Supply of Nonprofessional Manpower,* Manpower Research Monograph No. 11, 1969 (summary with list of occupations licensed by States); "Occupational Licensing: Protection for Whom?," *Manpower,* vol. 1, No. 6, July 1969, pp. 2–6.
3.5.10 George Washington University, The—John Herbert Norton, No. 91–09–66–23 Accuracy Analysis for Projections of Manpower in Metropolitan Areas	CFSTI—PB 182073; ERIC—MP 000556 ($4.50, Mf $0.50).
3.5.11 Georgia, University of—Ethel B. Jones, No. 91–11–66–46 A Feasibility Study to Identify the Underemployed and to Examine the Labor Market Attachment of Labor Force Non-participants in a Low-Income Area	CFSTI—PB 177559; ERIC—MP 000531 ($3.84, Mf $0.50); Research Monograph No. 4, Bureau of Business and Economic Research, Graduate School of Business Administration, Athens, Ga., 1969 ($3.50).
3.5.12 Grambling College—Charles A. Berry, Jr., No. 91–17–03 An Investigation of the Utilization of the Manpower Skills of the 1964 Graduating Class of Grambling College	CFSTI—PB 177560.
3.5.13 Harvard University—Penny H. Feldman, David M. Gordon, Michael Reich, and Peter B. Doeringer (ed.), Nos. 91–23–68–06 and 91–23–68–50 Low-Income Labor Markets and Urban Manpower Programs: A Critical Assessment	CFSTI—PB 192484; "Manpower Programs for Ghetto Labor Markets," *IRRA Proceedings,* Winter 1968, pp. 257–267.

Institution, Investigator(s), Grant No., and Title of Report	*Source of Copies (See abbreviation key and explanation, p. 177)*
3.5.14 Illinois, University of—Adolf Sturmthal, No. 91–15–66–29 A Study of Methods for Forecasting Employment	CFSTI—PB 178008; ERIC—MP 000671 ($3.00, Mf $0.50).
3.5.15 Institute for Creative Studies, The—William Carter, Joseph Eichenholz, Ellen Maycock, Anita B. Pfaff, and Martin Pfaff, No. 91–09–70–03 Public Transfer Payments and Labor Force Participation	CFSTI—PB 192272.
3.5.16 Maryland, University of—Paul Wasserman and Mary Lee Bundy, No. 91–22–66–08 Manpower Utilization and Requirements in Library and Information Sciences	"Manpower Blueprint," *Library Journal*, Jan. 15, 1967; "The Library and Information in a Time of Change," *Pacific Northwest Library Association Quarterly*, January 1967.
3.5.17 Maryland, University of—John W. Wysong, No. 91–22–68–02 Factors Affecting Labor Use and Worker Productivity on Efficient Dairy Farms	CFSTI—PB 178776; University of Maryland, Department of Agricultural Economics, Ag. Econ. Mimeo Series No. 27.
3.5.18 Maryland, University of—John W. Wysong, No. 91–22–68–02 Labor Productivity and Labor Force Characteristics of Selected Types of Commercial Farms	CFSTI—PB 178777; University of Maryland, Department of Agricultural Economics, Ag. Econ. Mimeo Series No. 28.
3.5.19 Maryland, University of—John W. Wysong, No. 91–22–68–02 Private and Public Farm Manpower Policy Implications of the Dairy Farm Labor Resource Adjustment Process	CFSTI—PB 178775; University of Maryland, Department of Agricultural Economics, Ag. Econ. Mimeo Series No. 23.
3.5.20 Massachusetts Institute of Technology—Robert Evans, Jr., and George E. Delehanty, No. 91–20–06 Low-Wage Employment: An Inventory and Assessment	CFSTI—PB 182072; ERIC—MP 000591 ($4.40, Mf $0.50); "Low-Wage Industries and the Working Poor," *Poverty and Human Resources Abstract*, March-April 1968 (article).

Institution, Investigator(s), Grant No., and Title of Report	*Source of Copies (See abbreviation key and explanation, p. 177)*
3.5.21 Massachusetts Institute of Technology—Frazier Kellogg, No. 91–23–67–11 Computer-Based Job Matching Systems: An Exploration of the State of the Art and the Proposed Nationwide Matching System	CFSTI—PB 177563; ERIC—MP 000680 ($8.35, Mf $0.75); *Computer-Based Aids to the Placement Process*, Industrial Relations Section, Alfred P. Sloan School of Management, Massachusetts Institute of Technology ($2.00, monograph).
3.5.22 Massachusetts Institute of Technology—David P. Taylor and Michael J. Piore, No. 91–23–67–41 Federal Training Programs for Dispersed Employment Occupations	CFSTI—PB 188675.
3.5.23 Massachusetts Institute of Technology—Jon M. Shepard, No. 91–23–69–34 Technology, Division of Labor and Alienation from Work	CFSTI—PB 191258; "Functional Specialization, Alienation, and Job Satisfaction," *ILRR*, vol. 23, No. 2, January 1970, pp. 207–219.
3.5.24 Michigan State University—James Riddle Hundley, Jr., No. 91–24–66–42 A Study of Interpersonal Relations Among Managers and Employees of Fruit and Vegetable Farms with Emphasis on Labor-Management Practices Utilized	CFSTI—PB 178536; MA—"Farm-Labor Relations in Michigan," *Farm Labor Developments*, September 1968 (summary).
3.5.25 Michigan, The University of—Dawn Day Wachtel, No. 91–24–67–05 The Working Poor	CFSTI—PB 178189; ERIC—MP 000555 ($6.30, Mf $0.50).
3.5.26 Michigan, The University of—Gordon Barhydt, No. 91–24–68–37 Feasibility Study of Centralized Information Services in Industrial Relations	
3.5.27 Michigan, The University of and Wayne State University—Louis A. Ferman, No. 91–24–66–03 Community Organization and the Mobilization of Resources for Manpower Development Programs	CFSTI—PB 188780.
3.5.28 Michigan, The University of and Wayne State University—Jeffry Piker, No. 91–24–67–24 Entry Into the Labor Force: A Survey of Literature on the Experiences of Negro and White Youths	CFSTI—PB 178900; ERIC—MP 000560 ($14.95, Mf $1.25).

Institution, Investigator(s), Grant No., and Title of Report	*Source of Copies (See abbreviation key and explanation, p. 177)*
3.5.29 Minnesota, University of—Herbert G. Heneman, Jr., and George Seltzer, No. 91–25–67–10 Manpower Planning and Forecasting in the Firm: An Exploratory Probe	CFSTI—PB 179078; ERIC—MP 001008 ($9.30, Mf $0.75).
3.5.30 Minnesota, University of—Edward Gross, No. 91–25–67–12 Report on Problems of Counseling Special Populations Pursuant to Government Manpower Programs	CFSTI—PB 177564; ERIC—MP 000626 ($1.35, Mf $0.25); *Employment Service Review*, January-February 1968 (summary).
3.5.31 Missouri, University of—Rex R. Campbell and Susan E. Mulvey, No. 91–27–66–02 Perception of Job Opportunities Among Low Income Groups in Missouri	CFSTI—PB 177868.
3.5.32 National Opinion Research Center—Richard Jaffe, Carolyn F. Huson, and Michael E. Schiltz, No. 91–15–66–01 College, Color, and Employment—Racial Differentials in Postgraduate Employment Among 1964 Graduates of Louisiana Colleges	CFSTI—PB 177556; ERIC—ED 015332 ($6.16, Mf $0.75).
3.5.33 New York, The Research Foundation of State University of, Albany—Haskel Benishay, No. 91–34–67–07 Development of Stochastic Labor Force and Working Life Models	"Stochastic Aspects of the Labor Force Process," *American Statistical Association, Proceedings of the Social Statistics Section, December 1967*, pp. 319–24; "Parameters and Relations of Stochastically Lagged and Disaggregative Time Series," *Econometrica*, January 1968; "Inflow-Stock-Outflow Time Series, Stochastic Lag and Disaggregation: A Note," *Journal of Applied Probability*, vol. 7, No. 1, April 1970, pp. 234–239.
3.5.34 New York University—Abraham L. Gitlow, No. 91–34–66–57 Conference on Unskilled Workers in the Labor Force: Problems and Proposals	CFSTI—PB 178416.

Institution, Investigator(s), Grant No., and Title of Report	*Source of Copies (See abbreviation key and explanation, p. 177)*
3.5.35 New York University—Jeanne L. Noble, No. 91–34–67–06 An Exploratory Study of Domestics' View of Their Working World (An Inquiry into the Methodology of a Research Design Formulated to Gather Information for a More Extensive Investigation)	CFSTI—PB 177865; ERIC—MP 000666 ($5.28, Mf $0.75).
3.5.36 North Texas State University—Sam B. Barton, No. 91–46–68–38 The Use of Workmen's Compensation Statistics as a Measure of Underwriter Performance	CFSTI—PB 188353.
3.5.37 Northeastern University—Jack Ferguson and David Grafstein, No. 91–23–67–49 A Pilot Study of Urban Career Patterns	CFSTI—PB 179851.
3.5.38 Northeastern University—Morris A. Horowitz and Harold M. Goldstein, No. 91–23–67–57 Hiring Standards for Paramedical Manpower	CFSTI—PB 179846.
3.5.39 Oakland Small Business Development Center, Inc.—Jack Brown, No. 91–05–67–29 A Study of the Manpower Implications of Small Business Financing—A Survey of 149 Minority and 202 Anglo-Owned Small Businesses in Oakland, Calif.	CFSTI—PB 178803.
3.5.40 Oregon, University of—Steven E. Deutsch, No. 91–39–68–17 Local Union Leadership and Technological Change	CFSTI—PB 178899.
3.5.41 Pennsylvania, University of—Ann R. Miller, No. 91–40–67–02 Current Occupation and Past Training of Adult Workers	CFSTI—PB 177866; ERIC—MP 000569 ($5.45, Mf $0.50); "Employment of Migrants," *Journal of American Statistical Association*, December 1967.

Institution, Investigator(s), Grant No., and Title of Report	*Source of Copies (See abbreviation key and explanation, p. 177)*
3.5.42 Purdue Research Foundation—Carolyn Cummings Perrucci, No. 91-16-66-28 Engineers and Scientists: A Comparative Analysis of Professional Values and Behavior	CFSTI—PB 178388; ERIC—MP 000596 ($4.40, Mf $0.50); "Purdue Engineering Graduates of the Late Thirties," *Journal of Engineering Education*, December 1967; "Social Origins, Educational Contexts and Career Mobility," *American Sociological Review*, June 1970; "Engineering and the Class Structure," chapter 10 in *The Engineers and the Social System*, Wiley & Sons, New York, 1969.
3.5.43 Purdue Research Foundation—Carolyn Cummings Perrucci, No. 91-16-67-43 The Female Engineer and Scientist: Factors Associated within the Pursuit of a Professional Career	CFSTI—PB 182149.
3.5.44 Rutgers-The State University—Leon Jansyn, Eric Kohlhof, Charles Sadowski, and Jackson Toby, No. 91-32-68-74 Ex-Offenders as Small Businessmen: Opportunities and Obstacles	CFSTI—PB 186137.
3.5.45 St. Mary's College—Svetozar Pejovich and William Sullivan, No. 91-25-66-04 The Role of Technical Schools in Improving the Skills and Earning Capacity of Rural Manpower: A Case Study	CFSTI—PB 177780; ERIC—ED 015329 ($1.04, Mf $0.25).
3.5.46 Sam Houston State College—George G. Killinger, No. 91-46-66-72 Job Obsolescence in the Law Enforcement and Correctional Field	CFSTI—PB 178234; ERIC—MP 000554 ($7.52, Mf $0.75).
3.5.47 Santa Clara, University of—Thomas M. Martinez, No. 91-05-68-72 Past and Present Counseling and Placement Procedures in Private Employment Agencies—An Empirical Study	CFSTI—PB 188154.

Institution, Investigator(s), Grant No., and Title of Report	*Source of Copies (See abbreviation key and explanation, p. 177)*
3.5.48 Sonoma State College Foundation—Cheryl J. Petersen, No. 91–05–68–31 The California Farm Labor Force: A Profile—A Report Prepared for the California Legislature Assembly Committee on Agriculture by its Advisory Committee on Farm Labor Research with the Assistance of the California Department of Employment	CFSTI—PB 184263; "The Low Income Worker in the California Farm Labor Force" (supplement to the report), Assembly Committee on Agriculture, California State Legislature, June 1970.
3.5.49 South Florida, University of—Dale O. Cloninger, No. 91–10–66–67 A Determination of the Extent of Participation of Significant But Nonpredominant Retiree Concentration in the Local Economy and Labor Force and Their Effect on Employment, Wage Rates, and Income	*Florida's Latent Resource: The Retired—Business and Economic Dimensions,* University of Florida Press, Gainesville, Fla.
3.5.50 Southern Illinois University—Herman R. Lantz and Ernest K. Alix, Nos. 91–15–66–34 and 91–15–67–50 A Study of the Relationship Between Resignation and Performance in a Job Retraining Program	CFSTI—PB 182513; Office of Research and Projects, Southern Illinois University, Carbondale, Ill. 62901 ($5.00).
3.5.51 Southern University and Agricultural and Mechanical College—Frederick C. Temple and Thomas T. Williams, No. 91–17–01 Employment Pattern of Southern University Graduates	CFSTI—PB 177872.
3.5.52 Stanford University—Melvin W. Reder, Nos. 91–05–66–53 and 91–05–68–34 Unemployment Among New Labor Market Entrants	CFSTI—PB 190485; "The Theory of Frictional Unemployment," *Economica,* February 1969 (article); Reprint Series No. 2, Institute of Public Policy Analysis, Stanford University, Stanford, Calif. 94305, 1969.
3.5.53 Temple University—Karen S. Koziara, No. 91–40–68–08 Labor Force Nonparticipation of Males in Urban Poor Areas	CFSTI—PB 183538.

Institution, Investigator(s), Grant No., and Title of Report	*Source of Copies (See abbreviation key and explanation, p. 177)*
3.5.54 Vanderbilt University—T. Aldrich Finegan, No. 91–45–67–19 The Economics of Labor Force Participation[2]	Princeton University Press, Princeton, N.J., 1969 ($18.50).
3.5.55 Vermont, University of—Milton J. Nadworny, No. 91–44–07 Employment Expansion in the Burlington, Vt., Labor Area, 1965	
3.5.56 West Virginia University—Robert W. Miller, No. 91–52–66–56 Social Psychological Factors Associated with Responses to Retraining	CFSTI—PB 177864; ERIC—MP 000668 ($2.20, Mf $0.25); *Social Psychological Factors Associated with Responses to Retraining*, Institute for Labor Studies, West Virginia University Research Series No. 2.
3.5.57 West Virginia University—John D. Photiadis, No. 91–52–68–10 Selected Social and Sociopsychological Characteristics of West Virginians in Their Own State and in Cleveland, Ohio	CFSTI—PB 192670; West Virginia University Bookstore, Morgantown, W. Va. ($2.50).
3.5.58 Wisconsin, The University of—David Chaplin, No. 91–53–69–03 Private Household Employment in the United States: An Exploratory Project	CFSTI—PB 192689.
3.5.59 Wisconsin, The University of—Gerald G. Somers, No. 91–53–70–02 Pilot Feasibility Study of Training in Business and Industry	CFSTI—PB 188049.
3.5.60 Xavier University—Lois G. Taplin, No. 91–17–04 Employment Pattern of Xavier University Graduates of 1964	CFSTI—PB 177561.

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[2] This report was coauthored by William G. Bowen.

SECTION 4. GUIDELINES FOR SUBMISSION OF RESEARCH PROPOSALS

These guidelines have been **revised** and supersede any previously issued. It is suggested that applicants study title I of the Manpower Development and Training Act, as amended (see appendix), and other relevant authorizing legislation **before** preparing proposals under these guidelines. This section includes guidelines for submission of proposals for research contracts, doctoral dissertation grants, and research project grants under the MDTA.

4.1 GUIDELINES FOR SUBMISSION OF RESEARCH PROPOSALS—
Research Contracts

The purpose of this section is to describe guidelines for the submission of proposals for research contracts that may be obtained from the Manpower Administration, U.S. Department of Labor.[1]

CONTRACTING AUTHORITY

Contracts may be awarded under authority of three legislative acts:

1. Title I of the Manpower Development and Training Act (42 U.S.C. 2571 et seq.), for the conduct of research in the broad areas of manpower resources, requirements, development, utilization, mobility, employment and unemployment, automation and technological change, and labor market information and job matching, to provide information which will lead to the development of informed and responsible manpower policies and programs.

2. Title I of the Economic Opportunity Act of 1964 (42 U.S.C. 2740) for studies that will provide information which will improve the overall effectiveness of the Neighborhood Youth Corps (part B, section 123(a) (1) and (2)); Operation Mainstream (part B, section 123(a)(3)); New Careers (part B, section 123(a)(4)); or Concentrated Employment Program (part B, section 123(a)(5)).

3. Social Security Act (81 Stat. 888), for studies which will provide information for the improvement of the overall effectiveness of the Work Incentive Program (title IV, part C, section 441).

Academic institutions, State and local government organizations, and other organizations and individuals from all of the social science disciplines with research capabilities in the manpower area may apply for contracts to conduct research.

PRELIMINARY PROPOSAL

The first step in applying for a research contract is the submission of a brief statement describing the researcher's basic study ideas.

The preliminary proposal should be two or three pages in length, and in nontechnical language. Twenty copies are required. It should present:

1. The problem to be investigated.
2. Study objectives and potential application of findings.
3. Research procedures.
4. Time and budget requirements (summary only).

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[1] See Title 29, Part 71 of the Code of Federal Regulations, Manpower Research and Evaluation Grants and Contracts. 33 F.R. 7113.

A separate statement concerning staff, facilities, capabilities for research, and previous related research experience should accompany the preliminary proposal. The preliminary proposal and any other related materials should be sent to:

Director, Office of Research and Development
Manpower Administration
U.S. Department of Labor
Washington, D.C. 20210

After reviewing this preliminary summary, the Manpower Administration may request a formal research proposal. (Formal proposals should follow the outline described below in Outline for Submission of Formal Proposals.)

GENERAL INFORMATION ABOUT REQUIREMENTS FOR FORMAL PROPOSALS

The proposed research should focus on solutions to significant manpower problems. It should seek to develop new knowledge or new applications of existing knowledge which give promise of furthering the objectives of the legislation under which the contract would be authorized.

The end product of the study—its findings and conclusions—may be of broad program interest or may be limited to special operational areas where they can be shown to provide a basis for generalized conclusions or to have application over a wide area.

Research Capability

The director or principal investigator must either have done successful research on the subject or have clearly demonstrated competence for performing or directing such research. The organization or individual submitting the proposal must have available facilities and staff adequate for carrying out the research.

Economic Efficiency

The probable value of the results of the overall study must justify the total proposed expenditure. The overall cost of the particular approach to solving the problem in the proposed study must be reasonable as compared with the cost of other possible approaches. Projects should not duplicate ongoing research and whenever possible should attempt to build on completed studies.

Review of Proposals

Formal proposals should be typed or otherwise reproduced on one side only and should run about eight to 10 pages in length. Thirty copies are required.

Proposals may be submitted at any time and will be reviewed as quickly as possible. Acknowledgment of receipt will usually be made within 15 days. Departmental processing, review, and evaluation of comments received usually require 60 days from receipt of proposal.

Notice of approval for negotiation (or disapproval) will be given as soon as possible following review and evaluation. Final approval for contracting will depend on a negotiated agreement on content, structure, and budget of the project by the organization and the Manpower Administration.

Final Research Report

Upon completion of a research contract, 15 copies of a final report are required. This report will present and analyze the information secured in the course of the project and, in addition, will include separate chapters covering: (1) A summary, (2) findings and conclusions, (3) implications for manpower program and policy, and (4) implications for further research. The report chapter covering implications of the research for manpower policy and program should emphasize recommendations for the use and application of the findings.

Publications derived from research conducted under the contract will acknowledge that the study was supported by the Manpower Administration, U.S. Department of Labor. The Department will have a nonexclusive right to publish and distribute the final report of the research and to use the findings, including any research designs developed, for any purpose whatsoever.

OUTLINE FOR SUBMISSION OF FORMAL PROPOSALS

There is no printed form to be used. Follow the outline below in describing the proposed project. Identify each section by number and title as indicated in the outline.

1. Cover sheet. The cover sheet of the proposal must show the following information in the order indicated:

> PROPOSAL SUBMITTED TO THE ASSOCIATE MANPOWER ADMINISTRATOR FOR POLICY, EVALUATION, AND RESEARCH, MANPOWER ADMINISTRATION, U.S. DEPARTMENT OF LABOR, FOR A CONTRACT FOR THE CONDUCT OF A RESEARCH PROJECT UNDER THE PROVISIONS OF (appropriate title and act of Congress).

Project title:	(Be concise, descriptive, and as specific as possible. Avoid obscure technical terms. Include key words under which project may be indexed.)
Submitted by:	(Name of organization, institution, agency, or individual hereinafter referred to as "organization.")
Address:	(Of organization, including zip code.)
Telephone number:	(Of organization. Include area code.)
Initiated by:	(Full name and position of individual who is initiating project, ordinarily the director or chief investigator.)
Transmitted by:	(Full name and position of official who is approving the submission of the proposal. This must be someone with authority to commit the organization to the pro-

posed project. The proposal should be signed by both the initiator and the transmitter on the original or master copy.)

Date: (Date transmitted.)

2. Abstract. On a single, separate page submit a summary of the proposal under two main heads: (a) Objectives, and (b) procedures.

3. Problem. State the problem to be investigated, explaining its importance and significance in relationship to the objective of the relevant authorizing legislation.

4. Objectives. Clearly state the hypotheses to be tested or the specific questions to be answered.

5. Relationship to other research. Discuss the proposed study in relation to previous or ongoing research or evaluation in related areas, and indicate how the proposed study will extend the body of knowledge about these areas. Point out what will be distinctive or different about the proposed study as compared with previous studies, and in what ways it may suggest or lend support to programs for action in the manpower area.

6. Procedure. Describe the research procedure in detail, listing the steps to be followed. Where pertinent, include specific information on each of the following:

a. Research method. What is the method to be employed in the study? Examples: Survey method, descriptive-theoretical analysis, participant observation, experimental and control group comparisons, etc.

b. Study subjects. Where there are populations, samples, experimental and control groups, indicate their purpose, origin, composition, size, types of data to be collected on each, sampling plans, etc.

c. Data collection. Describe types of data to be gathered and methods of collection. To the extent feasible, data that are already available or are being collected from other sources must be used. Sources of such data should be indicated. Describe questionnaires, interview guides, tests, and other research instruments to be used.

In studies for which it is determined that the project is subject to the requirements of the Federal Reports Act of 1942, it will be necessary for the researcher to submit copies of questionnaires and survey plans for clearance in advance of their use.

d. Analytic techniques. Indicate statistical or other analytic techniques to be used in testing the hypotheses or achieving the objectives of the study.

e. Phasing. Indicate approximate time schedule for various aspects or phases of the project.

7. Personnel. Give name, title, and a statement of the research experience of the principal investigator and other key personnel.

8. Facilities. Indicate special facilities and similar advantages, including research staff resources, available to the organization.

9. Duration. Estimate total time for the project and indicate beginning and ending dates.

10. Other information. Indicate other pertinent information including the following:

> a. Extent of agreed cooperation in the project by agencies whose support is necessary for the successful accomplishment of objectives. Include names and titles of officials of such agencies giving assurance of cooperation. For example, in various types of research projects, cooperation of cognizant organizations concerned with the Neighborhood Youth Corps program, the Concentrated Employment Program, and the State employment security agency may be vital.
>
> b. Amount of financial or other support available for this project from other sources.
>
> c. Whether this proposal is an extension or an addition to a previous Government-supported project.
>
> d. Whether financial support for this proposal or a similar one has been requested from any Government or private organization other than the Manpower Administration, U.S. Department of Labor.

11. Budget. Start this section on a new page, identifying it in sequence with previous sections as "11. Budget." The budget will include all estimated costs to be covered by any contract with the Department of Labor.

The cost of performance of a contract includes the costs of necessary direct items of expenditure incurred in the performance of the contract. It should also include an amount for overhead or indirect costs, as appropriate.

Following the categories as shown in the outline below, and rounding all amounts to the nearest dollar, list anticipated requirements for all items of expenditure. If the project is expected to extend beyond 12 months, indicate amount required for each year, and in total.

- a. Direct costs.
  - (1) Personal services.
    - (a) Include salaries and wages of all personnel directly attributable to actual performance under this contract, whether on a full- or part-time basis. List personnel by title, man-months (full- or part-time—be specific), and dollar amounts.
    - (b) Include, in connection with the above, but identify separately, allowances (dollar amounts and percentages of base salaries) for vacation, holidays, sick leave pay, and any other employee benefits customarily granted.
  - (2) Consultants. Include allowances for consultants as required.
  - (3) Materials and supplies. List all materials and supplies which will be directly expended by the contractor in performance of the contract.
  - (4) Travel. Furnish estimates of the number of trips, method of transportation, and cost of travel. Include the estimated amount for subsistence and daily allowance rates, auto mileage rates, etc., during travel, in accordance with the contractor's established policy.

(5) Communications. Include telephone, telegraph, and postal charges.
(6) Services. Include those not specifically covered under personal services (e.g., interviewer cost, computer cost). When a study involves securing information through Federal agencies (as U.S. Bureau of the Census) or State agencies (as State employment services), the cost of such services should be included.
(7) Other. Itemize by category and amount.

b. Indirect costs or overhead. Give the basis for the determination of proposed overhead rate and reference to other current Government contracts, if any.

Overhead rates may be fixed during the negotiation of a contract, or may be determined provisionally, with final settlement made at the conclusion of the contract. If an overhead rate has been established by a Government audit agency, identify the cognizant audit agency and contact person, the rate established, the allocation base, and the period for which established.

It is most important that all items of cost be readily identifiable regardless of whether they are shown as direct or indirect.

The proposed budget will be reviewed against applicable Federal regulations as part of the initial review. Where changes are necessary for projects which are otherwise approved for negotiation, these changes, as well as decisions concerning the determination of an overhead rate, will be made during the negotiation of the contract.

4.2 GUIDELINES FOR SUBMISSION OF RESEARCH PROPOSALS—
Doctoral Dissertation Grants Under the MDTA

Academic institutions offering doctoral degrees in areas of study which relate to the manpower field (such as economics, sociology and social work, psychology, education, and the behavioral sciences generally) may apply for grants to support dissertation research of graduate students who have completed all requirements for the doctoral degree except the doctoral dissertation, or who will have met these requirements before the grant is effective. A separate application must be submitted for each candidate nominated by the university for a grant. Such a grant will be made to the university in the name of the candidate.

GRANT CONDITIONS

The maximum amount of direct costs (see "The Application," paragraph 5.a., p. 263) of any one grant is $10,000 for a period not to exceed 1 year. For projects scheduled to require more than 1 year, support may be given through renewals of grants for a total of not to exceed 2 years, subject to availability of appropriated funds, receipt of progress reports showing reasonable progress, and requests for such renewals to be submitted not later than 1 month before the expiration of previous grants. The initial grant will indicate the period for which the Department intends to support the project.

The grant may cover the following costs:

1. Support for the doctoral candidate.
   a. Support will generally be on a stipend basis, determined by the proportion of time spent by the candidate on his dissertation times the following full-time annual stipend rates:

Single individual	$4,000
Dependent allowances (additional)	
Dependent spouse	500
Dependent children:	
1	500
2	800
3 (maximum)	1,100

   Under this schedule the maximum annual stipend rate for a married candidate with a dependent spouse and three or more dependent children is $5,600. The following example illustrates how a stipend may be computed:

> A married man with one child who teaches half time and works on his dissertation half time for 9 months of the year, and devotes full time to his dissertation the other 3 months could receive a stipend of $3,125—three-fourths of the year at half time, $1,875, plus one-fourth of the year at full time, $1,250.

b. A candidate who has been regularly employed in teaching or research activities by the sponsoring university or a related research organization, and for whom the dissertation research requires relief from part of his employment, may be supported at his established rate of pay, prorated for the proportion of his time devoted to the dissertation, provided that the total amount of the candidate's pay from the grant does not exceed the amount which the candidate could otherwise receive as a stipend if he devoted full time to his dissertation (see 1.a. above).

2. Major direct project costs, such as clerical assistance, necessary travel, computer time, and special supplies.

3. Indirect costs at a fixed rate not to exceed the established audited rate of the institution. The stipend may not be treated as a personnel cost for the purpose of computing the amount of indirect costs. However, the salary of a candidate employed by the university (as in 1.b. above) will not be considered a stipend.

4. Allowance to sponsoring university.

a. When the candidate is on a stipend basis, and is not charged tuition or fees, an allowance of $2,500 will be granted to the university in lieu of tuition, fees, general supplies, and other administrative costs for grants of 6-months' to 1-year's duration. For grants of less than 6 months, the allowance will be $1,250, except that for extensions or renewals of grants beyond the first year, the allowance will be prorated on a monthly basis. In accordance with the requirements of Bureau of the Budget Circular No. A–74 (see below), costs of services of academic and administrative staff, including the candidate's sponsor or thesis advisor, which would normally be covered by tuition and fees of the university, may not be shown as a contribution of the university.

b. When the candidate is employed by the university and paid a salary, no allowance will be granted. In such instances, the university may include the salary of the candidate in the base against which indirect costs rates may be applied.

In accordance with the Bureau of the Budget Circular No. A–74, dated December 13, 1965: "Participation in the costs of research supported by Federal grants," the grantee institution must share in the total cost of the project on "more than a token basis."

For applications which are approved, 10 copies of the final report resulting from the research will be required. Incorporated into or accompanying this report will be a short summary, which includes one paragraph on the project's objectives, one on procedures, two or three paragraphs on findings, and one on implications of findings. For projects extending beyond 1 year, the renewal will be considered as a separate grant, and a progress report will be required with the request for renewal.

Any survey plans, surveys, or questionnaires arising from the research under an approved grant will be identified solely as the responsibility of the university or the doctoral candidate and will in no way be attributed to the Department of Labor.

Publications based on the research conducted under the grant will acknowledge that the research was supported by a grant from the Manpower Administration of the U.S. Department of Labor under the Manpower Development and Training Act of

1962, as amended. The Department will have a nonexclusive right to publish and distribute the final report of the research and to use the findings, including any research designs developed by the research, for any purpose whatsoever.

The standard conditions applying to all dissertation grants are appended as Conditions Governing Grants in Support of Doctoral Dissertations at the end of these guidelines. As indicated below, any desired exceptions from these conditions should be stated with the transmittal of the application.

SUBMISSION OF APPLICATIONS

Fifteen copies of each application should be sent by the university to:

Director, Office of Research and Development
Manpower Administration
U.S. Department of Labor
Washington, D.C. 20210

Closing dates for applications are January 1, April 1, July 1, and October 1. Applications will be accepted which are postmarked or delivered on or before each of these dates for work to be conducted or initiated during the 1-year period following the date of the application. However, applications received in MA 1 week or more after a closing date, regardless of postmark, will be considered at the next scheduled closing date. Processing of applications requires approximately 2 months, including evaluation by review panels. Applicants may expect to be notified of action taken about 2 months after the applicable closing date. Applications approved for funding may be activated for work to begin approximately 1 month after notification. A grant approved for a candidate who has not completed all the requirements for the doctoral degree at the date of the application will require notice from the university that all requirements have been met before any payments will be made under the grant.

CRITERIA FOR APPROVAL

All applications are reviewed by a panel of persons from outside the Department with expertise in the manpower field. Only those applications which propose studies which have relevance to the objectives of title I of the Manpower Development and Training Act[2] are referred to the panel for their consideration and recommendation.

The panel considers all elements of an application in its review, giving primary emphasis to the candidate's ability, originality, and creativity as evidenced by the project proposal. The standing of the candidate and his proposed project relative to other candidates and to the availability of funds for the program determines whether the project will be approved for a grant. Approval may be conditional on acceptance of changes as recommended by the review panel, including substantive and budget revisions.

THE APPLICATION

Applications should contain the information requested below in the order indicated. There is no printed form to be used.

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[2] It is suggested that applicants study title I of the MDTA of 1962 **before preparing** proposals under these guidelines. (See p. 293.)

4.2 Guidelines for Doctoral Dissertation Grants

1. The first page should show the following:

PROPOSAL SUBMITTED TO THE ASSOCIATE MANPOWER ADMINISTRATOR FOR POLICY, EVALUATION, AND RESEARCH, MANPOWER ADMINISTRATION, U.S. DEPARTMENT OF LABOR, FOR A GRANT IN SUPPORT OF A DOCTORAL DISSERTATION UNDER THE PROVISIONS OF TITLE I OF THE MANPOWER DEVELOPMENT AND TRAINING ACT, PUBLIC LAW 87–415, AS AMENDED.

Submitted by:	(Legal name of university which will be used if grant is approved, and department sponsoring the candidate.)
Address:	(Of university, including zip code.)
Candidate:	(Name, address, and phone number. Candidate should sign original or master copy.)
Project title:	(Concise, descriptive, and as specific as possible.)
Sponsor:	(Name, position, academic degrees, and phone number of university advisor or sponsor of the candidate. Sponsor should sign original or master copy.)
Transmitted by:	(Name, position, and phone number of approving official. This should be someone with authority to commit the university, and he should sign the original or master copy. Unless otherwise indicated all correspondence, including the Notice of Grant Award, if approved, will be addressed to this official.)
Date:	(Date transmitted.)

2. The background of the candidate. Include statement of education and employment experience, and a list of published work. Indicate if candidate has met all requirements other than the dissertation, and, if not, when these will be met.

3. A statement by the candidate's sponsor in support of the proposal and indicating his evaluation of the interests and potential of the candidate. Where the sponsor is other than the thesis advisor for the candidate, the thesis advisor should also include such a statement.

4. A brief, but reasonably complete, statement of the proposed work prepared by the candidate, and covering:

a. The problem to be investigated, and its importance and significance.
b. The objectives of the study, including hypotheses to be tested and specific questions to which answers will be sought.
c. Procedures to be used. Include, as appropriate, general design, population and sample to be studied, data to be gathered and methods to be used, and methods of analysis to be used.
d. Anticipated practical applications of the findings, if appropriate.

e. A time schedule for the project and its major phases. This may extend beyond the 1-year limit on the initial grant as a basis for an additional grant.

f. Where support of other agencies is necessary for the successful completion of the objectives of this study, include a statement of the extent of cooperation already assured by such agencies.

5. A budget statement, in detail for the current year, with tentative totals for additional years, if any. Detailed budgets will be required as part of each renewal application. Items to be shown in detailed budgets are listed below. Dollar amounts are to be listed in two columns: (a) Amounts of funds requested and (b) amounts of the grantee institution's contribution from non-Federal funds.

a. Direct costs.

(1) Personal services. Show the portion of the candidate's time to be spent on the project, and the rate of stipend or salary.

(a) If a stipend, indicate the basis for the rate used in accordance with schedule of stipends shown earlier in these guidelines.

(b) If a salary, indicate the basis for the recommended rate of pay. Total salary charged to the grant may not exceed that amount which would be payable for full-time work on the dissertation under the schedule of stipends shown earlier in these guidelines (see 1.a., p. 259).

(2) Major materials and special supplies required for the project. Itemize in broad categories and amounts.

(3) Travel, including subsistence at actual cost but not to exceed that allowable under the customary practice of the grantee. Give detail of travel and subsistence, including types of transportation to be used and rates allowed therefor.

(4) Communication and services not included elsewhere. Itemize by broad categories and amounts. For computer use, show type, number, cost per hour, etc.

(5) Other direct costs. Itemize by category and amount. When the candidate is on a salary basis, tuition and fees normally paid to the institution by doctoral candidates working only on their dissertations may be shown as a contribution of the institution in lieu of personal and other services covered by such tuition and fees (as, for example, the time spent by the candidate's sponsor supervising the work of the candidate). Such tuition and fees are allowable as part of the grant amount only to the extent that they reflect grantee costs directly attributable to the work of the candidate.

b. Indirect costs. A **fixed rate** which does not exceed the grantee institution's established audited rate may be used. Identify the basis for the established rate—the date, audit agency, and reference numbers, if any.

c. Allowance to university. See page 260, numbered paragraph 4 for schedule of allowances. Include in amount requested.

6. A statement acknowledging that the Conditions Governing MDTA Grants in Support of Doctoral Dissertations (which follow) have been reviewed and will be accepted if the grant is approved. Any provisions from which the institution desires exception should be clearly indicated and justified.

DOCTORAL DISSERTATION GRANT CONDITIONS UNDER THE MANPOWER DEVELOPMENT AND TRAINING ACT OF 1962, AS AMENDED

1. DEFINITIONS

As used in this grant (see Notice of Grant Award, p. 273), the following terms shall have the meaning set forth below:

a. "Secretary" means the Secretary of the U.S. Department of Labor, and the term "his duly authorized representative" means any person or persons authorized to act for the Secretary.

b. "Grantee" means the institution named in this grant as the recipient of the grant award.

c. "Grant Officer" means the person executing this grant document on behalf of the Government, and any other individual who is properly designated a representative of the grant officer and acting within the limits of his authority.

d. "MA" means the Manpower Administration of the U.S. Department of Labor.

2. APPLICABILITY OF CONDITIONS

These conditions shall be applicable to the grantee, to the doctoral candidate, and to any agency or organization which, pursuant to a contract, agreement, or other arrangement with the grantee, undertakes responsibility for any part of this grant. Exceptions to these conditions may be requested in cases where compliance with one or more of them would cause unnecessary difficulties in carrying out the approved project. A waiver of any conditions must be in writing and must be signed by the grant officer. Any such waiver must be explicit; no waiver may be inferred from the fact that the grant is responsive to an application which may have contained material inconsistent with one or more of these conditions.

3. SCOPE OF WORK

The work and/or services which the grantee shall perform shall be consistent with the proposal as approved for support by the grant officer, and shall be performed in accordance with that document which is appended as Attachment 1 to the Notice of Grant Award.

4. AMOUNT OF GRANT

The amount of the Federal grant shall not exceed the smaller of (a) the "Total Amount of This Grant" shown in the Notice of Grant Award, or (b) the amount of cash expenditures (other than grantee contributions) made by the grantee for project purposes during the grant period. For this purpose, the amount of cash expenditures shall include only expenses which are chargeable to the budget of the grantee and which are determined by the grant officer to be allowable costs under the applicable provisions of subpart 1–15.3 of the Federal Procurement Regulations (41 CFR 1–15.3).

5. USE OF GRANT FUNDS

Grant funds shall be expended only for the purpose and activities of the approved project. Adjustments within the approved budget may be made by the doctoral candidate, with the approval of the grantee without prior approval by the grant officer, provided the total expenditures do not exceed the amount of the grant and the total pay and rate of pay of the doctoral candidate are not increased. Expenses which are attributable only in part to this project shall be prorated on a reasonable and consistent basis to determine the amount chargeable to the activities supported by this grant. The following statement, signed by the authorized university or college official, will accompany the final fiscal report:

> "I certify that all payments and expenditures reported are for proper grant purposes and in accordance with the approved budgets set forth in the grant documents."

6. OBLIGATION OF GRANT FUNDS

Grant funds may not be obligated prior to or after the grant period. Obligations outstanding as of the end of the grant period may be liquidated (paid out) after the end of the grant period. Such obligations shall involve only specified commitments for which a need existed during the grant period and which are supported by approved contracts, purchase orders, requisitions, invoices, bills, or other evidence of liability consistent with the grantee's purchasing procedures and incurred within the grant period. All obligations incurred during the grant period shall be liquidated within 3 calendar months after the end of the grant period, if practicable.

7. PAYMENTS UNDER THE GRANT

Payments under the grant will be made as follows:

a. The initial payment will be made in the amount set forth on the cover sheet.

b. Final payment will be made on receipt and acceptance by the grant officer of (1) the reports required under condition 17 below, and (2) a final fiscal statement accounting for all expenditures under this grant.

8. UNOBLIGATED FUNDS

Funds remaining unobligated at the end of the grant period cannot be transferred to another grant. The amount of the free or unobligated balance remaining at the end of the grant period shall be returned to the U.S. Department of Labor when the final financial report for the grant period is submitted. If savings occur in the liquidation of obligations outstanding at the end of the grant period, these become part of the unobligated balance.

9. TRAVEL EXPENSES

Expenses charged for travel shall be governed by the following:

a. Local travel by public carrier at actual costs and by privately owned automobile at the grantee's usual rate.

b. Out-of-town travel at the actual costs of rail or air fare, plus actual costs of subsistence, but not to exceed those allowable under the customary practice of the grantee, except that air travel shall be at less than first class where practicable.

10. SALARIES AND WAGES

The current policies of the grantee institution with respect to administration of salary and wages shall be applied to salaries and wages payable under this grant. The term "administration of salary and wage scales" is interpreted to mean hours of work, overtime rates, outside activities, general wage increases, and individual promotions. Consultants shall be paid at the prevailing rates, established by the institution.

11. ESTIMATE OF TIME OR EFFORT

The grantee shall maintain quarterly "Time or Effort Reports" for all professional staff rendering services under the grant. Such reports shall be prepared not later than 1 month following the end of the academic term within which the services were rendered. The estimate may be based on either hours or a percentage of effort. The estimate may be prepared by either the professional staff member himself or his supervisor and retained in the office of the individual responsible for preparation of expenditure reports. The "Time or Effort Reports" shall be available for inspection at any time by representatives of the Government.

12. LEASE-PURCHASE AGREEMENT

The grantee shall not, while using Federal funds in the performance of this grant, lease either real or personal property under terms providing, among other things, for the option to apply rent in whole or in part toward the purchase of the property being leased without prior written consent of the grant officer. Moreover, the grantee agrees to have the substance of this clause inserted in any subcontract or equivalent instrument entered into in performance of the grant.

13. EXPENSES DISALLOWED

No project funds shall be expended for:

a. The purchase of land, or any interest therein; the acquisition or construction of facilities; or the procurement of passenger-carrying vehicles;

b. The cost of meals for employees or officials of the grantee except when in travel status; or

c. Costs incurred before or after the grant period.

14. INTEREST EARNED ON FEDERAL FUNDS

All interest earned on Federal grant funds shall be reported on the financial report for the grant period and shall be returned by check payable to the U.S. Department of Labor.

15. ACCOUNTING FOR PROPERTY

Title to all property furnished by the Government or acquired with grant funds remains in the Government. Upon completion of the project, the grantee shall make a report to MA itemizing all nonconsumable property acquired with grant funds. The grant officer at that time will determine the disposition to be made of such property.

16. ACCOUNTING PROCEDURES AND AUDIT

Accounting for grant funds will be in accordance with grantee institution accounting practices, consistently applied, regardless of the source of funds. Itemization of all supporting records of grant expenditures, including grantee contributions, must be in sufficient detail to show the exact nature of the expenditures. As required by the Bureau of the Budget Circular A–74, December 13, 1965, the grantee's contribution to the project shall be not less in proportion to the total actual charges against the grant than the ratio indicated in the approved budget. Records must be available for audit by Government representatives and must be retained for 3 years after expiration of the grant or until grantee is notified by the grant officer that they may be disposed of.

17. REPORTS

Prior to the end of the grant period, grantee shall submit 10 reasonably durable, bound copies of a final research report covering the activities, research findings, implications, conclusions, and recommendations resulting from the project work. A short summary covering these subjects will either be included in or accompany the report. Said final report shall contain, either in the preface or on the title page, the following acknowledgment:

> "The material in this project was prepared under Grant No(s). (enter appropriate MA numbers) from the Manpower Administration, U.S. Department of Labor, under the authority of title I of the Manpower Development and Training Act of 1962, as amended. Researchers undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment. Therefore, points of view or opinions stated in this document do not necessarily represent the official position or policy of the Department of Labor."

18. QUESTIONNAIRE APPROVAL

No questionnaire or survey plan shall be identified as a Government study or Government-approved study, unless the grantee submits to the grant officer copies of said questionnaires and survey plans for clearance in advance of use, in accordance with the Federal Reports Act of 1942.

19. RIGHTS TO AND DISPOSITION OF DATA

The grantee may publish, cause to be published, or distribute for public consumption any information concerning the results or conclusions of research conducted under this grant, without prior review by the grant officer, provided that such publications contain the acknowledgment required by condition 17 above.

Grantee agrees to furnish 10 copies of each such publication to MA, and agrees, to the extent that the grantee has power to grant such rights, that the Government may duplicate, use, and disclose in any manner and for any purpose whatsoever, and have others so do, all data procured or reports delivered under this grant. It is understood that the grantee may not be required to disclose material of a confidential nature to the Government even though such material has been collected in the performance of this grant. If the grant results in a book or other copyrightable material, the author is free to copyright the work, but the grantee agrees that the Government reserves a royalty-free, nonexclusive, and irrevocable license to reproduce, publish, or otherwise use, and to authorize others to use, all copyrighted material and all material which can be copyrighted resulting from this grant. It is further agreed that in any material prepared under this grant under which a license is reserved to the Government under the preceding sentence, the following language shall be added plainly in the vicinity of the copyright: "Reproduction by the U.S. Government in whole or in part is permitted for any purpose."

20. REVOCATION

a. This grant may be revoked in whole or in part by the grant officer after notice to the grantee, except that a revocation shall not affect any financial commitment which in the judgment of the grant officer had become firm prior to the effective date of the revocation. Upon notice of revocation, the grantee shall make no new commitments and shall cancel and otherwise reduce, insofar as possible, the amount of outstanding commitments and repay to the grant officer, by check payable to the U.S. Department of Labor, the uncommitted balance of all funds that have been paid to the grantee under the terms of this grant.

b. The grantee shall communicate with the grant officer whenever it has reason to believe that circumstances may necessitate revocation of the grant. It is expected that the most common cause for revocation will be the inability of the grantee to carry out the program for which the grant was made or inability to adhere to the other conditions set forth in the grant instrument.

21. AVAILABILITY OF THE DOCTORAL CANDIDATE

The availability of the services of the person named in the notice of grant as "Doctoral Candidate" is one of the conditions of the grant. Grantee agrees to inform the Government immediately whenever it appears to be impossible for the doctoral candidate to continue to work on the project as planned. Under such circumstances the grant may be revoked.

22. CONTRACTS

a. Unless otherwise provided herein, prior written approval shall not be required for the purchase, lease, or rental by the grantee of articles, supplies, equipment, and services which are both necessary for and merely incidental to the performance of the work required under this grant, except that the following shall require such prior approval of the grant officer:

(1) Purchase of items of property or equipment having a unit value exceeding $250.

(2) Contracts and purchase orders exceeding 5 percent of the total estimated cost of this grant.

(3) Cost, cost-plus-a-fixed-fee, time-and-material, or labor-hour basis contracts.

(4) The purchase of any motor vehicle or airplane.

Nothing herein, however, shall be deemed to provide for the incurrence of any obligation of the Government in excess of estimated cost set forth in this grant or be construed to constitute a determination of the allowability of such cost. The grantee shall not enter into any agreement, under this grant, which provides for payment on a cost-plus-percentage-of-cost basis.

b. The grantee will give the Government immediate notice in writing of any action or suit filed and prompt notice of any claim made against the grantee by any party with whom the grantee has entered into a subcontract and which, in the opinion of the grantee, may result in litigation related in any way to this grant.

23. EQUAL OPPORTUNITY

(The following clause is applicable unless this grant is exempt under the rules, regulations, and relevant orders of the Secretary of Labor (41 CFR, ch. 60).)

During the performance of this grant, the grantee agrees as follows:

a. The grantee will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The grantee will take affirmative action to insure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to, the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The grantee agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the grant officer setting forth the provisions of this equal opportunity clause.

b. The grantee will state, in all solicitations or advertisements for employees placed by or on behalf of the grantee, that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

c. The grantee will send to each labor union or representative of workers, with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency grant officer, advising the labor union or workers' representative of the grantee's commitments under this equal opportunity clause and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

d. The grantee will comply with all provisions of Executive Order No. 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

e. The grantee will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the Department of Labor and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

f. In the event of the grantee's noncompliance with the equal opportunity clause of this grant or with any of the said rules, regulations, or orders, this grant may be canceled, terminated, or suspended, in whole or in part, and the grantee may be declared ineligible for further Government grants or contracts in accordance with procedures authorized in Executive Order No. 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive

Order No. 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

g. The grantee will include the provisions of paragraphs a. through g. in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order No. 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The grantee will take such action with respect to any subcontract or purchase order as the Department of Labor may direct as a means of enforcing such provisions, including sanctions for noncompliance. Provided, however, that in the event the grantee becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the contracting agency, the grantee may request the United States to enter into such litigation to protect the interests of the United States.

24. POLITICAL ACTIVITY

No funds provided hereunder shall be used for any partisan political activity or to further the election or defeat of any candidate for public office, and no part of the administration of the program authorized by this grant shall be intermingled with or closely affiliated with any partisan political activity. In addition, it should be noted that employees of public bodies and Community Action Agencies may be subject to limitations on their political activities under the Hatch Act [5 U.S.C. 1502(a), 18 U.S.C. 595].

25. BUY AMERICAN ACT

a. In acquiring end products, the Buy American Act (41 U.S.C. 10(a)(d)) provides that the Government give preference to domestic source end products. For the purpose of this clause:

(1) "Components" mean those articles, materials, and supplies which are directly incorporated in the end products;

(2) "End products" mean those articles, materials, and supplies which are to be acquired under this grant for public use; and

(3) A "domestic source end product" means:

(a) an unmanufactured end product which has been mined or produced in the United States;

(b) an end product manufactured in the United States if the cost of components thereof which are mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. For the purpose of this a. (3) (b), components of foreign origin of the same type or kind as the products referred to in b. (2) or (3) of this clause shall be treated as components mined, produced, or manufactured in the United States.

b. The grantee agrees that there will be delivered under this grant only domestic source end products, except end products:

(1) Which are for use outside the United States;

(2) Which the Government determines are not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities and of a satisfactory quality;

(3) As to which the Secretary determines the domestic preference to be inconsistent with the public interest; or

(4) As to which the Secretary determines the cost to the Government to be unreasonable.

(The foregoing requirements are administered in accordance with Executive Order No. 10582, dated December 17, 1954.)

26. COVENANT AGAINST CONTINGENT FEES

The grantee warrants that no person or selling agency or other organization has been employed or retained to solicit or secure this grant upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by the grantee for the purpose of securing business. For breach or violation of this warranty, the Government shall have the right to annul this grant without liability or, in its discretion, to deduct from the grant award, or consideration, or otherwise recover, the full amount of such commission, percentage, brokerage, or contingent fee.

27. OFFICIALS NOT TO BENEFIT

No member of or delegate to Congress, or resident commissioner, shall be admitted to any share or part of this grant, or to any benefit that may arise therefrom; but this provision shall not be construed to extend to this grant if made with a corporation for its general benefit.

28. DISCLAIMER OF LIABILITY

Liabilities for the project supported by this grant are that of the grantee and not the Federal Government, which assumes no liability with respect to accidents, illnesses, or claims arising out of the grant. Accordingly, the grantee is advised to take such steps to insure or protect itself as it may deem desirable.

U.S. DEPARTMENT OF LABOR

NOTICE OF GRANT AWARD: Under authority of the Manpower Development and Training Act of 1962 (42 U.S.C. 2571)

GRANT NO: ______________ GRANT PERIOD: From ______________ through ______________

PROPOSAL: Number ______________ Title:

GRANTEE:

☐ Principal Investigator

Name: ______________

☐ Doctoral Candidate

APPROVED BUDGET FOR THIS AWARD PERIOD:

INITIAL PAYMENT (See Condition 7) ---- $ ______________

TOTAL AMOUNT OF THIS GRANT --- $ ______________

TOTAL GRANTEE CONTRIBUTION --- $ ______________

TOTAL PROJECT BUDGET ------- $ ______________

General level of support recommended for this project following this grant period:

Period: ______________

Amount: $ ______________

CONDITIONS: This Grant is made in support of the proposal which is a part of this Grant and is incorporated as Attachment 1, and is made subject to the Conditions 1 through ____ set forth in Attachment 2, except condition(s) ____, which is (are) deleted.

Grantee accepts this Grant and the conditions of its approval.

BY: ______________

TITLE: ______________

DATE: ______________

Secretary of Labor, U.S. Department of Labor.

BY: ______________

TITLE: Director, Office of Research and Development

DATE: ______________

4.3 GUIDELINES FOR SUBMISSION OF RESEARCH PROPOSALS— Research Project Grants Under the MDTA

Public and private nonprofit academic institutions and research organizations may apply for grants to support research projects or research-related activities in the manpower field.

Projects approvable under this program include:

1. Research which explores new fields of inquiry.
2. Research which explores new methods of approach to existing fields of inquiry.
3. Studies which test the effectiveness of feasibility of research projects or programs.
4. Syntheses of the current state of knowledge in various research areas in order to provide guides for future programs.

Under special circumstances, grants may also be made to assist in support of research projects underwritten by other agencies, but which require additional monies to assure completion.

GRANT CONDITIONS

The maximum amount of direct cost (see "The Application," paragraph 10.a., p. 279) of any one grant is $15,000 for a period not to exceed 1 year. For projects scheduled for more than 1 year, additional grants, each within the same limitation, may be made for a total of not to exceed 2 years, subject to availability of appropriated funds, receipt of progress reports showing reasonable progress, and requests for such renewals to be submitted not later than 1 month before the expiration of previous grants. The initial grant will indicate the period for which the Department intends to support the project.

Grant funds may be expended only for the purpose of carrying out the research program as approved. In accordance with the Bureau of the Budget Circular No. A–74 dated December 13, 1965, "Participation in the costs of research supported by Federal grants," the grantee institution must share in the total cost of the project on "more than a token basis."

All grant awards are subject to the condition that the principal investigator designated in the application continues to be responsible for the conduct of the approved project for its duration. Continuation of grants in the event the principal investigator becomes unavailable will be contingent upon written approval by the Department of the person chosen by the grantee to replace the principal investigator.

For applications which are approved, 10 reproduced copies of the final report resulting from the research will be required. Incorporated into or accompanying this report will be a short summary, which includes one paragraph on the project's objectives, one on procedures, two or three paragraphs on findings, and one on implications of findings. For projects extending beyond 1 year, each renewal will be considered as a separate grant, and a progress report will be required with the request for renewal.

Any survey plans, surveys, or questionnaires arising from the research under an approved grant will be identified solely as the responsibility of the grantee, and will in no way be attributed to the Department of Labor.

Publications based on the research conducted under the grant will acknowledge that the research was supported by a grant from the Manpower Administration of the U.S. Department of Labor under the Manpower Development and Training Act of 1962, as amended. The Department will have a nonexclusive right to publish and distribute the final report of the research, and to use the findings, including any research designs developed by the research, for any purpose whatsoever.

The standard conditions applying to all research grants are appended as Conditions Governing Grants in Support of Research Projects, at the end of these guidelines. As indicated below, any desired exceptions from these conditions should be stated with the transmittal of the application.

CRITERIA FOR APPROVAL

A primary consideration in the approval of any grant request is the relevance of the area of study to the objectives of title I of the Manpower Development and Training Act.[3] Proposals which are determined to be relevant to the objectives of the Manpower Development and Training Act will be considered by a review panel of persons from outside the Department with expertise in the manpower field and approved or disapproved in relation to criteria such as the following:

1. Manpower significance.
    a. The project is focused primarily on significant manpower problems.
    b. The anticipated results or methodology of the project have broad national interest, provide a basis for generalized conclusions, or have practical applicability.
2. Research design.
    a. The problem with which the research proposes to deal is clearly defined.
    b. The proposal reflects an adequate knowledge of other research related to the problem.
    c. Questions to be answered or hypotheses to be tested are well formulated and clearly stated.
    d. The proposal outlines fully the procedures to be followed, and whenever applicable, includes information on such matters as sampling procedures, including the size of the population to be studied and the size of sample and control groups, as well as types of data to be gathered, and statistical analyses to be made.
3. Personnel and facilities.
    a. The experience and training of the principal investigator appear adequate to carry out the research.
    b. The facilities available to the investigator(s) are adequate to carry out the research.
    c. The plan provides, wherever feasible, for encouraging and increasing

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[3] It is suggested that applicants study title I of the MDTA of 1962 **before** preparing proposals under these guidelines. (See p. 293.)

knowledge and skills of professional personnel and of new research workers.

4. Economic efficiency.
    a. The suggested approach to the problem is reasonable in terms of overall cost as compared with the cost of other possible approaches.
    b. The suggested approach to problems involving the analysis of statistical data utilizes, to the extent feasible, data already available or being collected through Government and other sources.
    c. The total proposed expenditure is justifiable in terms of the probable value of the results of the proposed research, and the grantee institution is contributing a reasonable share of the total cost.

Approval may be conditional on acceptance of changes in the project or the budget, or both, as recommended by the review panel.

GRANT REVISIONS

The terms of any approved grant will be revised only if major changes in the areas to be investigated are agreed to be necessary. Changes in the research approach suggested by the development of a project or intended to expedite the achievement of its objectives, but not materially changing the scope and purpose of the study, may be made at the discretion of the grantee. Adjustments within the estimated approved budget may be made at the discretion of the grantee if the total amount of the grant and the total pay and rate of pay of the principal investigator(s) are not increased.

Prior written approval of the Department is required for:

1. Substantial changes in the scope or purpose of a study, with or without changes in the budget;

2. Any increase in the total budget for a grant;

3. Any increase in the total pay or rate of pay of the principal investigator(s); or

4. Any change in the grant period.

SUBMISSION OF APPLICATIONS

Fifteen copies of each application should be sent to:

Director, Office of Research and Development
Manpower Administration
U.S. Department of Labor
Washington, D.C. 20210

Closing dates for applications are January 1, April 1, July 1, and October 1. Applications will be accepted which are postmarked or delivered on or before each of these dates for work scheduled to start 3 months or more following the applicable closing date. However, applications received 1 week or more after a closing date, regardless of postmark, will be considered at the next scheduled closing date. Processing of applications requires approximately 2 months, including evaluation by review panels. Applicants may expect to be notified of action taken about 2 months after the closing date. Applications approved for funding may be activated for work to begin approximately 1 month after notification.

THE APPLICATION

Applications should contain the information requested in the order indicated. There is no printed form to be used.

1. The first page should show the following:

PROPOSAL SUBMITTED TO THE ASSOCIATE MANPOWER ADMINISTRATOR FOR POLICY, EVALUATION, AND RESEARCH, MANPOWER ADMINISTRATION, U.S. DEPARTMENT OF LABOR, FOR A GRANT IN SUPPORT OF A RESEARCH PROJECT UNDER THE PROVISIONS OF TITLE I OF THE MANPOWER DEVELOPMENT AND TRAINING ACT, PUBLIC LAW 87–415, AS AMENDED.

Project title:	(Be concise, descriptive, and as specific as possible. Include key words under which project may be indexed.)
Submitted by:	(Legal name of institution or organization which will be used if grant is approved, hereinafter referred to as "organization.")
Address:	(Of organization, including zip code.)
Telephone number:	(Of organization. Include area code.)
Principal investigator:	(Name, position, academic degrees, and phone number of the principal investigator.)
Transmitted by:	(Name, position, and phone number of official who is approving the submission of the proposal. This must be someone with authority to commit the organization to the proposed project. Unless otherwise indicated, all correspondence, including the Notice of Grant Award, if approved, will be addressed to this official.) (The proposal should be signed by both the principal investigator and the transmitter on the original or master copy.)
Date:	(Date transmitted.)

2. Abstract. On a single separate page submit a summary of the proposal including (a) Title of project; (b) name of organization; (c) name of principal investigator; (d) objectives; (e) procedures; (f) time schedule, i.e., beginning and ending dates (first year total and project total if longer than 1 year).

3. Problem. Give a brief statement of the problem to be investigated, explaining its importance and significance.

4. Objectives. State the objectives of the research project, including hypotheses to be tested and specific questions to which answers will be sought. For research design studies, include the ultimate objectives of the research to be designed.

5. Relationship to other research. Cite or summarize pertinent research related to the proposed study. Present the rationale upon which the proposal is based. Indicate the uniqueness of the proposal.

6. Procedure. Describe the procedure in detail listing the steps to be followed. Include specific information on each of the following, as appropriate:

   a. General design of project.
   b. Population and sample to be studied.
   c. Data to be gathered and methods to be used.
   d. Methods of analysis to be used.
   e. Time schedule indicating length of time required for each major phase of study.

7. Personnel. Give name, title, and a brief statement of the research experience of the principal investigator, and of other key personnel.

8. Facilities. Indicate special facilities and similar advantages, including research staff resources, available to the organization.

9. Other information. Indicate other information pertinent to the proposal, including the following:

   a. Amount of financial or other support for this project from other sources.
   b. Whether this proposal has been or will be submitted to any other agency or organization for financial support.
   c. Whether this proposal is an extension of or an addition to a previous project supported by the Department of Labor or other Government agency.
   d. Whether this proposal or a similar one was previously submitted to the Department of Labor or other Government agency.
   e. Extent to which cooperation has been agreed to by agencies whose support is necessary for the successful completion of the objectives of the proposal.

10. Budget. Include a section on estimated costs of the project to be covered by the grant and by the grantee institution from non-Federal sources. Start this section on a new page.

The proposed budget will be reviewed against applicable Federal regulations, such as Bureau of the Budget Circular No. A–21, as part of the review of the proposal. Where changes are necessary for the projects which are otherwise approved, final approval will be conditional on the acceptance of these changes.

The cost of the project includes the costs of necessary direct items of expenditures incurred in its performance; it may also include an amount of overhead or indirect costs at a rate which does not exceed the grantee institution's established audited rate for such projects.

Following the categories as shown in the outline below, and rounding all amounts to the nearest dollar, list anticipated requirements for all items of expenditure in two columns: (1) Amount of funds requested, and (2) amount of the grantee institution's contribution from non-Federal funds. If the project is expected to extend beyond 1 year, indicate amounts required for each year and in total.

   a. Direct costs.
      (1) Personal services. Include:

(a) Salaries[4] and wages of all personnel which are directly attributable to actual performance under this grant, whether on a full- or part-time basis. (List personnel by title, man-months, and dollar amounts.)

(b) In connection with the above, but identified separately, allowances for vacation, holiday, and sick leave pay. Also include employee benefits to extent customarily provided by organization.

(c) Consultants[4] as required.

(2) Materials and supplies. Itemize in broad categories and amounts all materials and supplies which are to be directly expended in performance of the project.

(3) Travel. Include subsistence during travel at actual cost, but not to exceed that allowable under the customary practices of the grantee. Give detail of travel and subsistence, including types of transportation and rates allowed therefor.

(4) Communications. Include telephone and telegraph charges unless these are included in indirect costs.

(5) Services. Include those not specifically covered under personal services. Itemize by category and amount.

(6) Other. Itemize by category and amount. For computer use, show type, number, cost per hour, etc.

b. Indirect costs or overhead. A **fixed rate** which does not exceed the grantee institution's established audited rate may be used. Identify the basis for the established rate—date, audit agency, and reference numbers, if any.

11. A statement acknowledging that the Conditions Governing Grants in Support of Research Projects (which follow) have been reviewed and will be accepted if the grant is approved. If there are any provisions from which the organization desires exception, these should be clearly indicated and justified.

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[4] For salaries at rates of $15,000 or more per annum and for consultant fees in excess of $75 per day, include a statement establishing that each such rate is in accordance with the established compensation rates and policies of the grantee institution.

RESEARCH PROJECT GRANT CONDITIONS UNDER THE MANPOWER DEVELOPMENT AND TRAINING ACT OF 1962, AS AMENDED

1. DEFINITIONS

As used in this grant (see Notice of Grant Award, p. 289), the following terms shall have the meaning set forth below:

a. "Secretary" means the Secretary of the U.S. Department of Labor, and the term "his duly authorized representative" means any person or persons authorized to act for the Secretary.

b. "Grantee means the institution named in this grant as the recipient of the grant award.

c. "Grant Officer" means the person executing this grant document on behalf of the Government, and any other individual who is properly designated a representative of the grant officer and acting within the limits of his authority.

d. "MA" means the Manpower Administration of the U.S. Department of Labor.

2. APPLICABILITY OF CONDITIONS

These conditions shall be applicable to the grantee and to any agency or organization which, pursuant to a contract, agreement, or other arrangement with the grantee, undertakes responsibility for any part of this grant. Exceptions to these conditions may be requested in cases where compliance with one or more of them would cause unnecessary difficulties in carrying out the approved project. A waiver of any condition must be in writing and must be signed by the grant officer. Any such waiver must be explicit; no waiver may be inferred from the fact that the grant is responsive to an application which may have contained material inconsistent with one or more of these conditions.

3. SCOPE OF WORK

The work and/or services which the grantee shall perform shall be consistent with the proposal as approved for support by the grant officer, and shall be performed in accordance with that document which is appended as Attachment 1 to the Notice of Grant Award.

4. AMOUNT OF GRANT

The amount of the Federal grant shall not exceed the smaller of (a) the "Total Amount of This Grant" shown in the Notice of Grant Award, or (b) the amount of cash expenditures (other than grantee contributions) made by the grantee for project purposes during the grant period. For this purpose, the amount of cash expenditures shall include only expenses which are chargeable to the budget of the grantee and which are determined by the grant officer to be allowable costs under the applicable provisions of subpart 1–15.3 of the Federal Procurement Regulations (41 CFR 1–15.3).

5. USE OF GRANT FUNDS

Grant funds shall be expended only for the purpose and activities of the approved project. Adjustments within the approved budget may be made by the grantee without prior approval by the grant officer, provided the total expenditures do not exceed the amount of the grant and the total pay and rate of pay of principal professional staff are not increased. Expenses which are attributable only in part to this project shall be prorated on a reasonable and consistent basis to determine the amount chargeable to the activities supported by this grant. The following statement, signed by the authorized university or college official, will accompany the final fiscal report:

> "I certify that all payments and expenditures reported are for proper grant purposes and in accordance with the approved budgets set forth in the grant documents."

6. OBLIGATION OF GRANT FUNDS

Grant funds may not be obligated prior to or after the grant period. Obligations outstanding as of the end of the grant period may be liquidated (paid out) after the end of the grant period. Such obligations shall involve only specified commitments for which a need existed during the grant period and which are supported by approved contracts, purchase orders, requisitions, invoices, bills, or other evidence of liability consistent with the grantee's purchasing procedures and incurred within the grant period. All obligations incurred during the grant period shall be liquidated within 3 calendar months after the end of the grant period, if practicable.

7. PAYMENTS UNDER THE GRANT

Payments under the grant will be made as follows:

a. The initial payment will be made in the amount set forth on the cover sheet.

b. Final payment will be made on receipt and acceptance by the grant officer of (1) the reports required under condition 17 below, and (2) a final fiscal statement accounting for all expenditures under this grant.

8. UNOBLIGATED FUNDS

Funds remaining unobligated at the end of the grant period cannot be transferred to another grant. The amount of the free or unobligated balance remaining at the end of the grant period shall be returned to the U.S. Department of Labor when the final financial report for the grant period is submitted. If savings occur in the liquidation of obligations outstanding at the end of the grant period, these become part of the unobligated balance.

9. TRAVEL EXPENSES

Expenses charged for travel shall be governed by the following:

a. Local travel by public carrier at actual costs and by privately owned
b. Out-of-town travel at the actual costs of rail or air fare, plus actual costs
automobile at the grantee's usual rate.

of subsistence, but not to exceed those allowable under the customary practice of the grantee, except that air travel shall be at less than first class where practicable.

10. SALARIES AND WAGES

The current policies of the grantee institution with respect to administration of salary and wages shall be applied to salaries and wages payable under this grant. The term "administration of salary and wage scales" is interpreted to mean hours of work, overtime rates, outside activities, general wage increases, and individual promotions. Consultants shall be paid at the prevailing rates, established by the institution. In exceptional cases where the required caliber of services cannot be obtained at the prevailing rates, a request to pay a higher rate, with justification therefor, shall be submitted to the grant officer for consideration and prior approval before the commitment is made.

11. ESTIMATE OF TIME OR EFFORT

The grantee shall maintain quarterly "Time or Effort Reports" for all professional staff rendering services under the grant. Such reports shall be prepared not later than 1 month following the end of the academic term within which the services were rendered. The estimate may be based on either hours or a percentage of effort. The estimate may be prepared by either the professional staff member himself or his supervisor and retained in the office of the individual responsible for preparation of expenditure reports. The "Time or Effort Reports" shall be available for inspection at any time by representatives of the Government.

12. LEASE-PURCHASE AGREEMENT

The grantee shall not, while using Federal funds in the performance of this grant, lease either real or personal property under terms providing, among other things, for the option to apply rent in whole or in part toward the purchase of the property being leased without prior written consent of the grant officer. Moreover, the grantee agrees to have the substance of this clause inserted in any subcontract or equivalent instrument entered into in performance of the grant.

13. EXPENSES DISALLOWED

No project funds shall be expended for:

a. The purchase of land, or any interest therein; the acquisition or construction of facilities; or the procurement of passenger-carrying vehicles;

b. The cost of meals for employees or officials of the grantee except when in travel status; or

c. Costs incurred before or after the grant period.

14. INTEREST EARNED ON FEDERAL FUNDS

All interest earned on Federal grant funds shall be reported on the financial report for the grant period and shall be returned by check payable to the U.S. Department of Labor.

15. ACCOUNTING FOR PROPERTY

Title to all property furnished by the Government or acquired with grant funds remains in the Government. Upon completion of the project, the grantee shall make a report to MA itemizing all nonconsumable property acquired with grant funds. The grant officer at that time will determine the disposition to be made of such property.

16. ACCOUNTING PROCEDURES AND AUDIT

Accounting for grant funds will be in accordance with grantee institution accounting practices, consistently applied, regardless of the source of funds. Itemization of all supporting records of grant expenditures, including grantee contributions, must be in sufficient detail to show the exact nature of the expenditures. As required by the Bureau of the Budget Circular A–74, December 13, 1965, the grantee's contribution to the project shall be not less in proportion to the total actual charges against the grant than the ratio indicated in the approved budget. Records must be available for audit by Government representatives and must be retained for 3 years after expiration of the grant or until grantee is notified by the grant officer that they may be disposed of.

17. REPORTS

Prior to the end of the grant period, grantee shall submit 10 reasonably durable, bound copies of a final research report covering the activities, research findings, implications, conclusions, and recommendations resulting from the project work. A short summary covering these subjects will either be included in or accompany the report. Said final report shall contain, either in the preface or on the title page, the following acknowledgment:

> "The material in this project was prepared under Grant No(s). (enter appropriate MA numbers) from the Manpower Administration, U.S. Department of Labor, under the authority of title I of the Manpower Development and Training Act of 1962, as amended. Researchers undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment. Therefore, points of view or opinions stated in this document do not necessarily represent the official position or policy of the Department of Labor."

18. QUESTIONNAIRE APPROVAL

No questionnaire or survey plan shall be identified as a Government study or Government-approved study, unless the grantee submits to the grant officer copies of said questionnaires and survey plans for clearance in advance of use, in accordance with the Federal Reports Act of 1942.

19. RIGHTS TO AND DISPOSITION OF DATA

The grantee may publish, cause to be published, or distribute for public consumption any information concerning the results or conclusions of research conducted under this grant, without prior review by the grant officer, provided that such publications contain the acknowledgment required by condition 17 above.

Grantee agrees to furnish 10 copies of each such publication to MA, and agrees, to the extent that the grantee has power to grant such rights, that the Government may duplicate, use, and disclose in any manner and for any purpose whatsoever, and have others so do, all data procured or reports delivered under this grant. It is understood that the grantee may not be required to disclose material of a confidential nature to the Government even though such material has been collected in the performance of this grant. If the grant results in a book or other copyrightable material, the author is free to copyright the work, but the grantee agrees that the Government reserves a royalty-free, nonexclusive, and irrevocable license to reproduce, publish, or otherwise use, and to authorize others to use, all copyrighted material and all material which can be copyrighted resulting from this grant. It is further agreed that in any material prepared under this grant under which a license is reserved to the Government under the preceding sentence, the following language shall be added plainly in the vicinity of the copyright: "Reproduction by the U.S. Government in whole or in part is permitted for any purpose."

20. REVOCATION

a. This grant may be revoked in whole or in part by the grant officer after notice to the grantee, except that a revocation shall not affect any financial commitment which in the judgment of the grant officer had become firm prior to the effective date of the revocation. Upon notice of revocation the grantee shall make no new commitments and shall cancel and otherwise reduce, insofar as possible, the amount of outstanding commitments and repay to the grant officer, by check payable to the U.S. Department of Labor, the uncommitted balance of all funds that have been paid to the grantee under the terms of this grant.

b. The grantee shall communicate with the grant officer whenever it has reason to believe that circumstances may necessitate revocation of the grant. It is expected that the most common cause for revocation will be the inability of the grantee to carry out the program for which the grant was made or inability to adhere to the other conditions set forth in the grant instrument.

21. AVAILABILITY OF THE PRINCIPAL INVESTIGATOR

The availability of the services of the person named in the notice of grant as "Principal Investigator" is one of the conditions of the grant. Grantee agrees to inform the Government immediately whenever it appears to be impossible for the principal investigator to continue to work on the project as planned. Under such circumstances the grant may be revoked unless a substitute is approved by the grant officer.

22. CONTRACTS

a. Unless otherwise provided herein, prior written approval shall not be required for the purchase, lease, or rental by the grantee of articles, supplies, equipment, and services which are both necessary for and merely incidental to the performance of the work required under this grant, except that the following shall require such prior approval of the grant officer:

(1) Purchase of items of property or equipment having a unit value exceeding $250.

(2) Contracts and purchase orders exceeding 5 percent of the total estimated cost of this grant.

(3) Cost, cost-plus-a-fixed-fee, time-and-material, or labor-hour basis contracts.

(4) The purchase of any motor vehicle or airplane.

Nothing herein, however, shall be deemed to provide for the incurrence of any obligation of the Government in excess of estimated cost set forth in this grant or be construed to constitute a determination of the allowability of such cost. The grantee shall not enter into any agreement, under this grant, which provides for payment on a cost-plus-percentage-of-cost basis.

b. The grantee will give the Government immediate notice in writing of any action or suit filed and prompt notice of any claim made against the grantee by any party with whom the grantee has entered into a subcontract and which, in the opinion of the grantee, may result in litigation related in any way to this grant.

23. EQUAL OPPORTUNITY

(The following clause is applicable unless this grant is exempt under the rules, regulations, and relevant orders of the Secretary of Labor (41 CFR, ch. 60).)

During the performance of this grant, the grantee agrees as follows:

a. The grantee will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The grantee will take affirmative action to insure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to, the following: Employment, upgrading, demotion, or transfer: recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The grantee agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the grant officer setting forth the provisions of this equal opportunity clause.

b. The grantee will state, in all solicitations or advertisements for employees placed by or on behalf of the grantee, that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

c. The grantee will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency grant officer, advising the labor union or workers' representative of the grantee's commitments under this equal opportunity clause and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

d. The grantee will comply with all provisions of Executive Order No. 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

e. The grantee will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the Department of Labor and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

f. In the event of the grantee's noncompliance with the equal opportunity clause of this grant or with any of the said rules, regulations, or orders, this grant may be canceled, terminated, or suspended, in whole or in part, and the grantee may be declared ineligible for further Government grants or contracts in accordance with procedures authorized in Executive Order No. 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order No. 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

g. The grantee will include the provisions of paragraphs a. through g. in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order No. 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The grantee will take such action with respect to any subcontract or purchase order as the Department of Labor may direct as a means of enforcing such provisions, including sanctions for noncompliance. Provided, however, that in the event the grantee becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the contracting agency, the grantee may request the United States to enter into such litigation to protect the interests of the United States.

24. POLITICAL ACTIVITY

No funds provided hereunder shall be used for any partisan political activity or to further the election or defeat of any candidate for public office, and no part of the administration of the program authorized by this grant shall be intermingled with or closely affiliated with any partisan political activity. In addition, it should be noted that employees of public bodies and Community Action Agencies may be subject to limitations on their political activities under the Hatch Act [5 U.S.C. 1502(a), 18 U.S.C. 595].

25. BUY AMERICAN ACT

a. In acquiring end products, the Buy American Act (41 U.S.C. 10 (a) (d)) provides that the Government give preference to domestic source end products. For the purpose of this clause:

(1) "Components" mean those articles, materials, and supplies which are directly incorporated in the end products;

(2) "End products" mean those articles, materials, and supplies which are to be acquired under this grant for public use, and

(3) A "domestic source end product" means:

(a) an unmanufactured end product which has been mined or produced in the United States, and

(b) an end product manufactured in the United States if the cost of components thereof which are mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. For the purpose of this a. (3) (b), components of foreign origin of the same type or kind as the products referred to in b. (2) or (3) of this clause shall be treated as components mined, produced, or manufactured in the United States.

b. The grantee agrees that there will be delivered under this grant only domestic source end products, except end products:

(1) Which are for use outside the United States;

(2) Which the Government determines are not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities and of a satisfactory quality;

(3) As to which the Secretary determines the domestic preference to be inconsistent with the public interest; or

(4) As to which the Secretary determines the cost to the Government to be unreasonable.

(The foregoing requirements are administered in accordance with Executive Order No. 10582, dated December 17, 1954.)

26. COVENANT AGAINST CONTINGENT FEES

The grantee warrants that no person or selling agency or other organization has been employed or retained to solicit or secure this grant upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by the grantee for the purpose of securing business. For breach or violation of this warranty, the Government shall have the right to annul this grant without liability or, in its discretion, to deduct from the grant award, or consideration, or otherwise recover, the full amount of such commission, percentage, brokerage, or contingent fee.

27. OFFICIALS NOT TO BENEFIT

No member of or delegate to Congress, or resident commissioner, shall be admitted to any share or part of this grant, or to any benefit that may arise therefrom; but this provision shall not be construed to extend to this grant if made with a corporation for its general benefit.

28. DISCLAIMER OF LIABILITY

Liabilities for the project supported by this grant are that of the grantee and not the Federal Government, which assumes no liability with respect to accidents, illnesses, or claims arising out of the grant. Accordingly, the grantee is advised to take such steps to insure or protect itself as it may deem desirable.

U.S. DEPARTMENT OF LABOR

NOTICE OF GRANT AWARD: Under authority of the Manpower Development and Training Act of 1962 (42 U.S.C. 2571)

GRANT NO: ______________ GRANT PERIOD: From ______________ through ______________

PROPOSAL: Number ______________ Title:

GRANTEE:

☐ Principal Investigator

Name: ______________________________

☐ Doctoral Candidate

APPROVED BUDGET FOR THIS AWARD PERIOD:

INITIAL PAYMENT (See Condition 7)----$______________

TOTAL AMOUNT OF THIS GRANT---$______________

TOTAL GRANTEE CONTRIBUTION---$______________

TOTAL PROJECT BUDGET-------$______________

General level of support recommended for this project following this grant period:

Period: ______________

Amount: $ ______________

CONDITIONS: This Grant is made in support of the proposal which is a part of this Grant and is incorporated as Attachment 1, and is made subject to the Conditions 1 through ____ set forth in Attachment 2, except condition(s) ____, which is (are) deleted.

Grantee accepts this Grant and the conditions of its approval.

BY: ______________________________

TITLE: ______________________________

DATE: ______________________________

Secretary of Labor, U.S. Department of Labor.

BY: ______________________________

TITLE: Director, Office of Research and Development

DATE: ______________________________

APPENDIX

This section gives the text of title I of the Manpower Development and Training Act of 1962, as amended.

APPENDIX—Manpower Development and Training Act of 1962, Title I, as Amended[1]

AN ACT

Relating to manpower requirements, resources, development, and utilization, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Manpower Development and Training Act of 1962".

TITLE I—MANPOWER REQUIREMENTS, DEVELOPMENT, AND UTILIZATION

Statement of Findings and Purpose

SEC. 101. The Congress finds that there is critical need for more and better trained personnel in many vital occupational categories, including professional, scientific, technical, and apprenticeable categories; that even in periods of high unemployment, many employment opportunities remain unfilled because of the shortages of qualified personnel; and that it is in the national interest that current and prospective manpower shortages be identified and that persons who can be qualified for these positions through education and training be sought out and trained as quickly as is reasonably possible, in order that the Nation may meet the staffing requirements of the struggle for freedom. The Congress further finds that the skills of many persons have been rendered obsolete by dislocations in the economy arising from automation or other technological developments, foreign competition, relocation of industry, shifts in market demands, and other changes in the structure of the economy; that Government leadership is necessary to insure that the benefits of automation do not become burdens of widespread unemployment; that the problem of assuring sufficient employment opportunities will be compounded by the extraordinarily rapid growth of the labor force in the next decade, particularly by the entrance of young people into the labor force, that improved planning and expanded efforts will be required to assure that men, women, and young people will be trained and available to meet shifting employment needs; that many persons now unemployed or underemployed, in order to become qualified for reemployment or full employment must be assisted in providing themselves with skills which are or will be in demand in the labor market; that the skills of many persons now employed are inadequate to enable them to make their maximum contribution to the Nation's economy; and that it is in the national interest that the opportunity to acquire new skills be afforded to these people with the least delay in order to alleviate the hardships of unemployment, reduce the costs of unemployment compensation and public assistance, and to increase the Nation's productivity and its capacity to meet the requirements of the space age. The Congress further finds that many professional employees who have become unemployed because of the specialized nature of their previous employment are in need of brief refresher or reorientation educational courses in order to become qualified for other employment in their professions, where such training would further the purposes of this Act. It is therefore the purpose of this Act to require the Federal Government to appraise the manpower requirements and resources of the Nation, and to develop and apply the information and methods needed to deal with the problems of unemployment resulting from automation and technological changes and other types of persistent unemployment.

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[1] 42 U.S.C. 2571 et seq. P.L. 37–415, Mar. 15, 1962, 76 Stat. 24–33, as amended by (a) P.L. 87–729, Oct. 1, 1962, 76 Stat. 679, (b) P.L. 88–214, Dec. 19, 1963, 77 Stat. 422, (c) P.L. 89–15, Apr. 26, 1965, 79 Stat. 75, (d) P.L. 89–792, Nov. 7, 1966, 80 Stat. 1434, (e) P.L. 80–794, Nov. 8, 1966, 80 Stat. 1451, and (f) P.L. 90–636, Oct. 24, 1968, 82 Stat. 1352.

Evaluation, Information, and Research

SEC. 102. To assist the Nation in accomplishing the objectives of technological progress while avoiding or minimizing individual hardship and widespread unemployment, the Secretary of Labor shall—

(1) evaluate the impact of, and benefits and problems created by automation, technological progress, and other changes in the structure of production and demand on the use of the Nation's human resources; establish techniques and methods for detecting in advance the potential impact of such developments; develop solutions to these problems, and publish findings pertaining thereto;

(2) establish a program of factual studies of practices of employers and unions which tend to impede the mobility of workers or which facilitate mobility, including but not limited to early retirement and vesting provisions and practices under private compensation plans; the extension of health, welfare, and insurance benefits to laid-off workers; the operation of severance pay plans; and the use of extended leave plans for education and training purposes. A report on these studies shall be included as part of the Secretary's report required under section 107;

(3) appraise the adequacy of the Nation's manpower development efforts to meet foreseeable manpower needs and recommend needed adjustment, including methods for promoting the most effective occupational utilization of and providing useful work experience and training opportunities for untrained and inexperienced youth;

(4) promote, encourage, or directly engage in programs of information and communication concerning manpower requirements, development, and utilization, including prevention and amelioration of undesirable manpower effects from automation and other technological developments and improvement of the mobility of workers;

(5) arrange, through grants or contracts, for the conduct of such research and investigations as give promise of furthering the objectives of this Act; and

(6) establish a program of experimental, developmental, demonstration, and pilot projects, through grants to or contracts with public or private

nonprofit organizations, or through contracts with other private organizations, for the purpose of improving techniques and demonstrating the effectiveness of specialized methods in meeting the manpower, employment, and training problems of worker groups such as the long-term unemployed, disadvantaged youth, displaced older workers, the handicapped, members of minority groups, and other similar groups. In carrying out this subsection the Secretary of Labor shall, where appropriate, consult with the Secretaries of Health, Education, and Welfare, and Commerce, and the Director of the Office of Economic Opportunity. Where programs under this paragraph require institutional training, appropriate arrangements for such training shall be agreed to by the Secretary of Labor and the Secretary of Health, Education, and Welfare. He shall also seek the advice of consultants with respect to the standards governing the adequacy and design of proposals, the ability of applicants, and the priority of projects in meeting the objectives of this Act.

Job Development Programs

SEC. 103. The Secretary of Labor shall stimulate and assist, in cooperation with interested agencies both public and private, job development programs, through on-the-job training and other suitable methods, that will serve to expand employment by the filling of those service and related needs which are not now being met because of lack of trained workers or other reasons affecting employment or opportunities for employment.

Labor Mobility Demonstration Projects

SEC. 104. (a) During the period ending June 30, 1970, the Secretary of Labor shall develop and carry out, in a limited number of geographical areas, pilot projects designed to assess or demonstrate the effectiveness in reducing unemployment of programs to increase the mobility of unemployed workers by providing assistance to meet their relocation expenses. In carrying out such projects the Secretary may provide such assistance, in the form of grants or loans, or both, only to involuntarily unemployed individuals who cannot reasonably be expected to secure full-time employment in the community in which they reside, have bona fide offers of employment (other than temporary or seasonal employment), and are deemed qualified to perform the work for which they are being employed.

(b) Loans or grants provided under this section shall be subject to such terms and conditions as the Secretary shall prescribe, with loans subject to the following limitations:

(1) there is reasonable assurance of repayment of the loan;

(2) the credit is not otherwise available on reasonable terms from private sources or other Federal, State, or local programs;

(3) the amount of the loan, together with other funds available, is adequate to assure achievement of the purposes for which the loan is made;

(4) the loan bears interest at a rate not less that (A) a rate determined by the Secretary of the Treasury, taking into consideration the average market yield on outstanding Treasury obligations of comparable maturity, plus (B) such additional charge, if any, toward covering other costs of the program as the Secretary may determine to be consistent with its purposes; and

(5) the loan is repayable within not more than ten years.

(c) Of the funds appropriated for a fiscal year to carry out this Act, not more than $5,000,000 may be used for the purposes of this section.

Trainee Placement Assistance Demonstration Projects

SEC. 105. During the period ending June 30, 1970, the Secretary of Labor shall develop and carry out experimental and demonstration projects to assist in the placement of persons seeking employment through a public employment office who have successfully completed or participated in a federally assisted or financed training, counseling, work training, or work experience program and who, after appropriate counseling, have been found by the Secretary to be qualified and suitable for the employment in question, but to whom employment is or may be denied for reasons other than ability to perform, including difficulty in securing bonds for indemnifying their employers against loss from the infidelity, dishonesty, or default of such persons. In carrying out these projects the Secretary may make payments to or contracts with employers or institutions authorized to indemnify employers against such losses. Of the funds appropriated for a fiscal year to carry out this Act, not more than $300,000 may be used for purpose of this section.

Labor Market Information and Job Matching Program

SEC. 106. (a) The Secretary of Labor shall develop a comprehensive system of labor market information on a national, State, local, or other appropriate basis, including but not limited to information regarding—

(1) the nature and extent of impediments to the maximum development of individual employment potential including the number and characteristics of all persons requiring manpower services;

(2) job opportunities and skill requirements;

(3) labor supply in various skills;

(4) occupational outlook and employment trends in various occupations; and

(5) in cooperation and after consultation with the Secretary of Commerce, economic and business development and location trends.

Information collected under this subsection shall be developed and made available in a timely fashion in order to meet in a comprehensive manner the needs of public and private users, including the need for such information in recruitment, counseling, education, training, placement, job development, and other appropriate activities under this Act and under the Economic Opportunity Act of 1964, the Social Security Act, the Public Works and Economic Development Act of 1965, the Wagner-Peyser Act, the Vocational Education Act of 1963, the Vocational Rehabilitation Act, the Demonstration Cities and Metropolitan Development Act of 1966, and other relevant Federal statutes.

(b) The Secretary of Labor shall develop and publish on a regular basis information on available job opportunities throughout the United States on a National, State, local, or other appropriate basis for use in public and private job placement and related activities and in connection with job matching programs conducted pursuant to this subsection. The Secretary is directed to develop and establish a program for matching the qualifications of unemployed, underemployed, and low-income persons with employer requirements and job opportunities on a National, State, local, or other appropriate basis. Such programs shall be designed to provide a quick and direct means of communication among local recruitment, job training and placement agencies and organizations, and between such agencies and organizations on a National, State, local, or other appropriate basis, with a view to the referral and placement of such persons in jobs. In the development of such a program, the Secretary shall make maximum possible use of electronic data processing and telecommunication systems for the storage, retrieval, and communication of job and worker information.

(c) A report on the activities and achievements under this section shall be included in the report required under section 107.

(d) Not less than 2 per centum of the sums appropriated in any fiscal year to carry out titles I, II, and III of this Act shall be available only for carrying out the provisions of subsection (b) of this section.

Manpower Report

SEC. 107. The Secretary of Labor shall make such reports and recommendations to the President as he deems appropriate pertaining to manpower requirements, resources, use, and training; and the President shall transmit to the Congress within sixty days after the beginning of each regular session (commencing with the year 1963) a report pertaining to manpower requirements, resources, utilization, and training.

INDEXES

In this section, the projects are indexed by code number according to contractor and grantee organizations and institutions; individual researchers; contract or grant numbers; and subject.

For code numbers, first digit is section number, second digit is subsection number, and the last digits refer to numerical order of descriptions within each subsection.

A. INDEX—Contractor and Grantee Organizations and Institutions

(For code numbers, first digit is section number, second digit is subsection number, and last digits refer to numerical order of descriptions within each subsection.)

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